

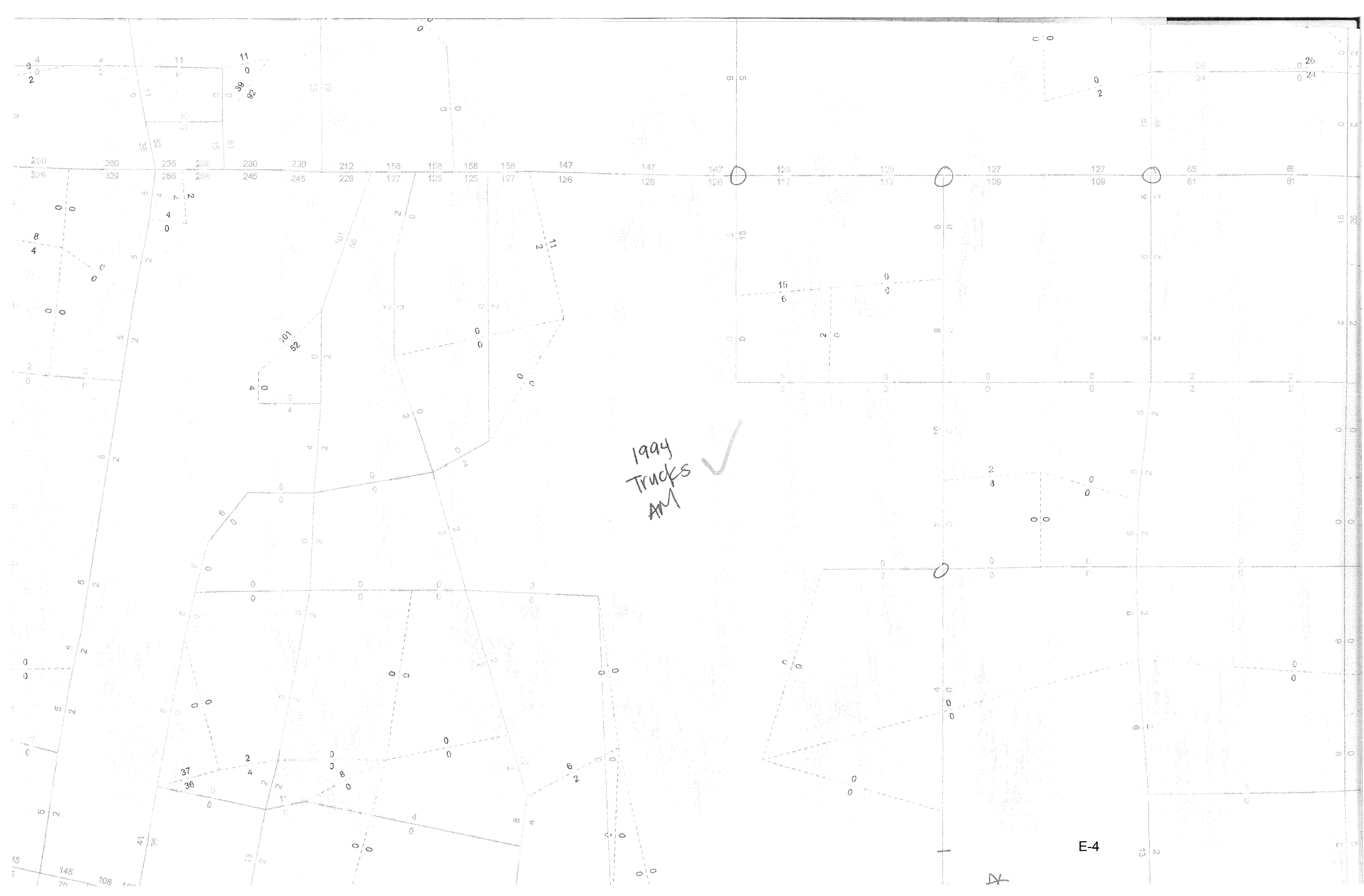
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APPENDIX E

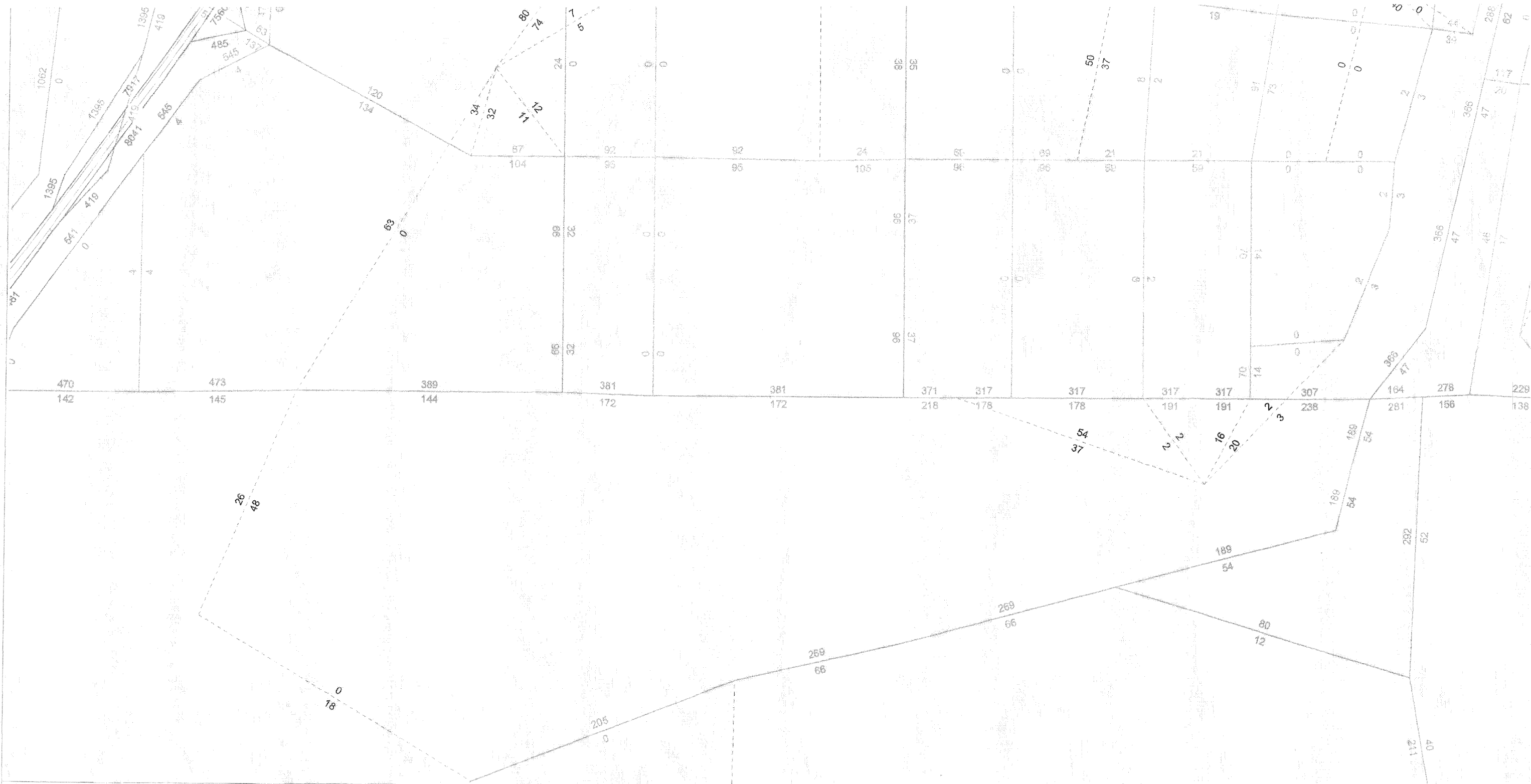
CTP MODEL PLOTS



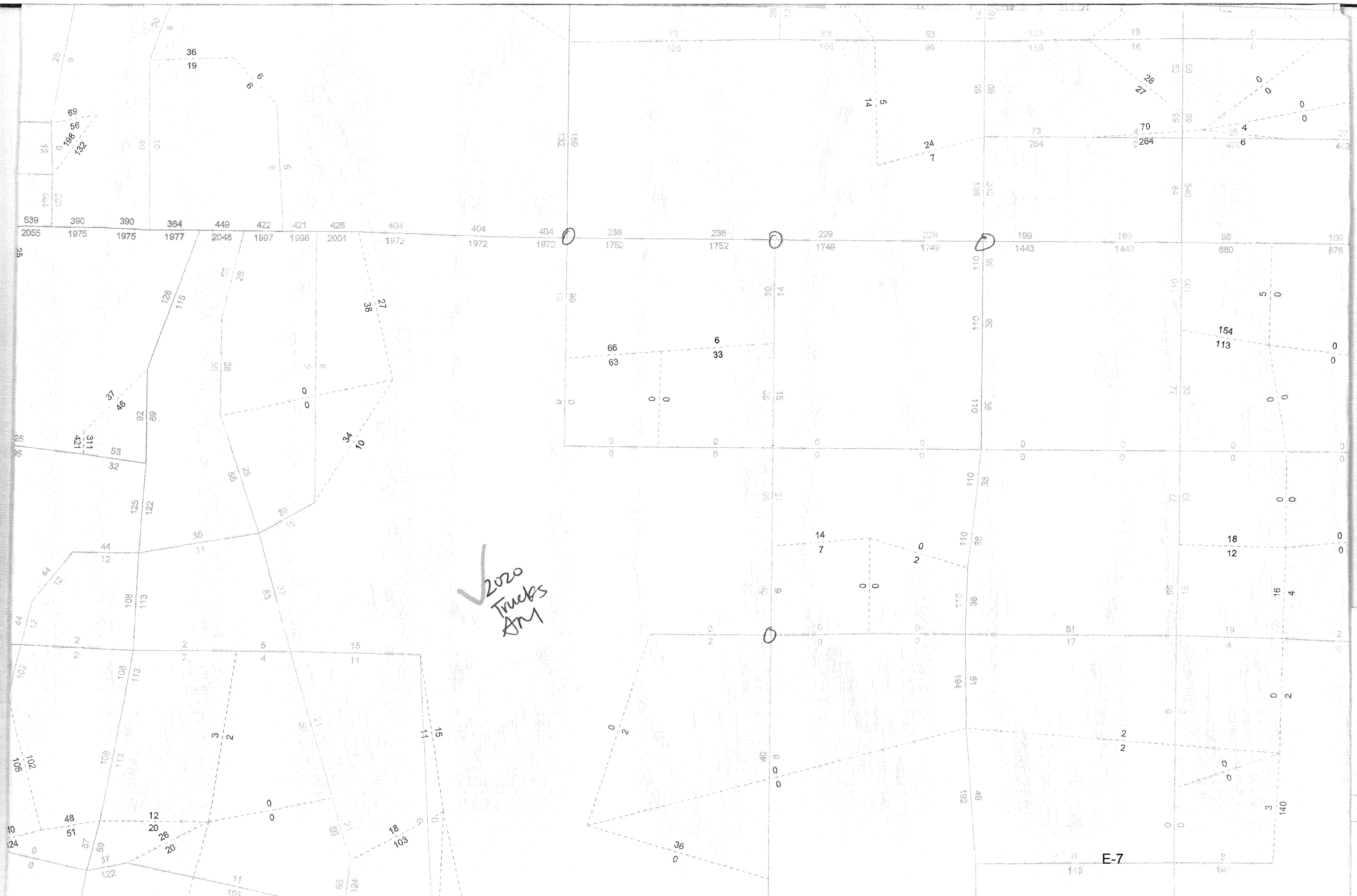
E-3



1994
Trucks
AM

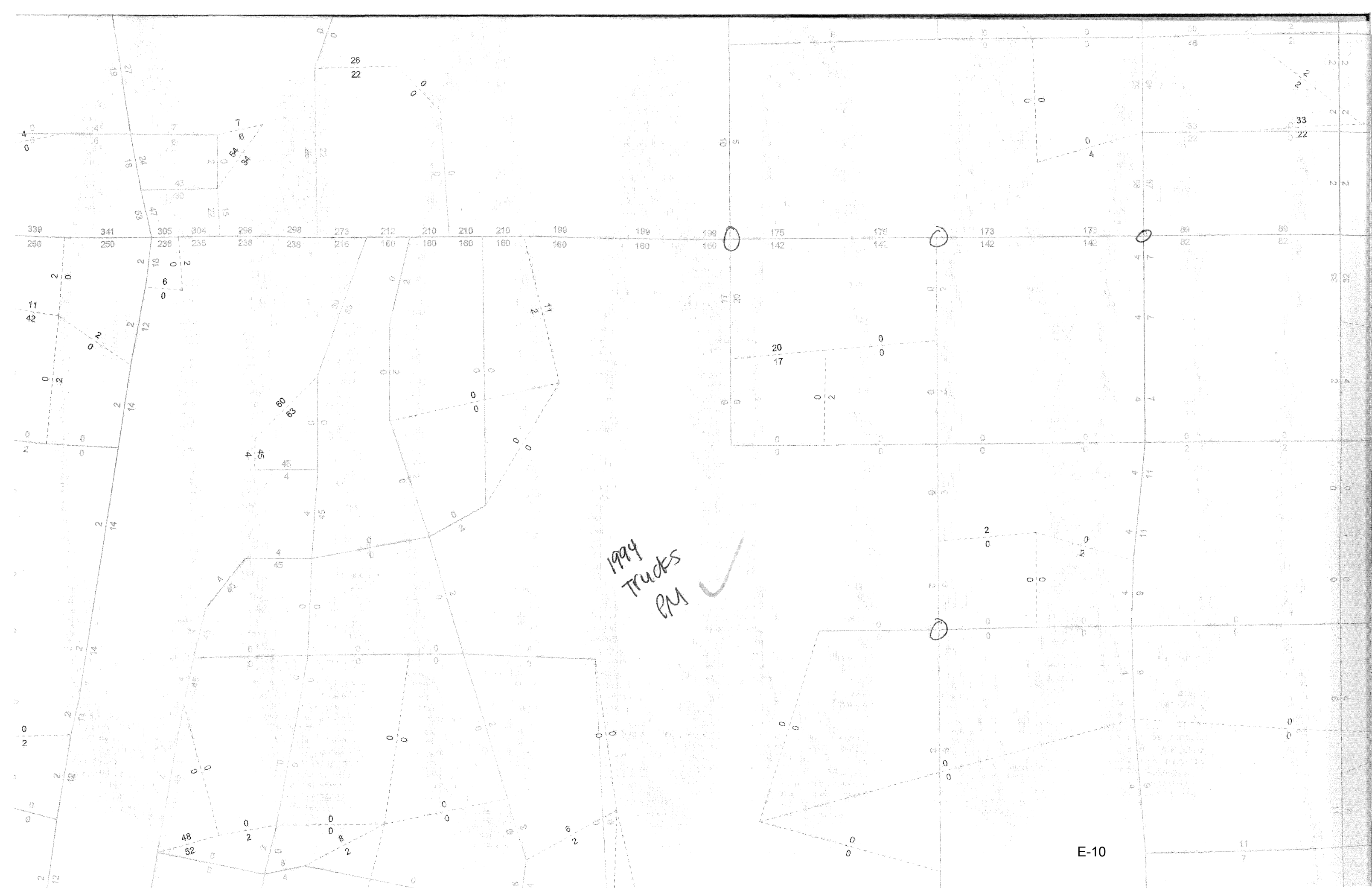


YEAR 2020 TRUCKS, AM PEAK PERIOD (3 HOURS)
Viper Software by The Urban Analysis Group



✓ 2020 Trucks Am

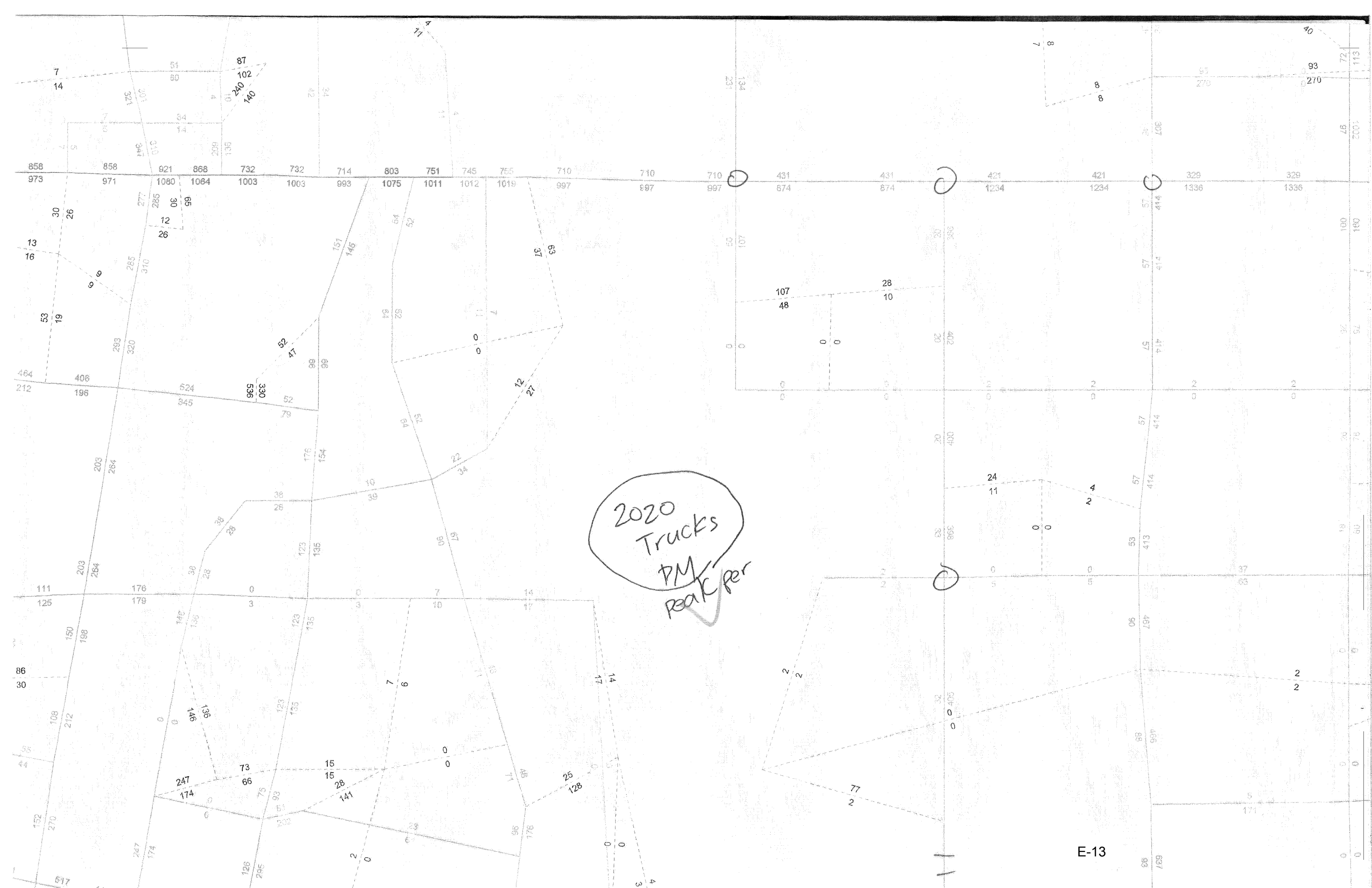
✓ 2020 Trucks
Am



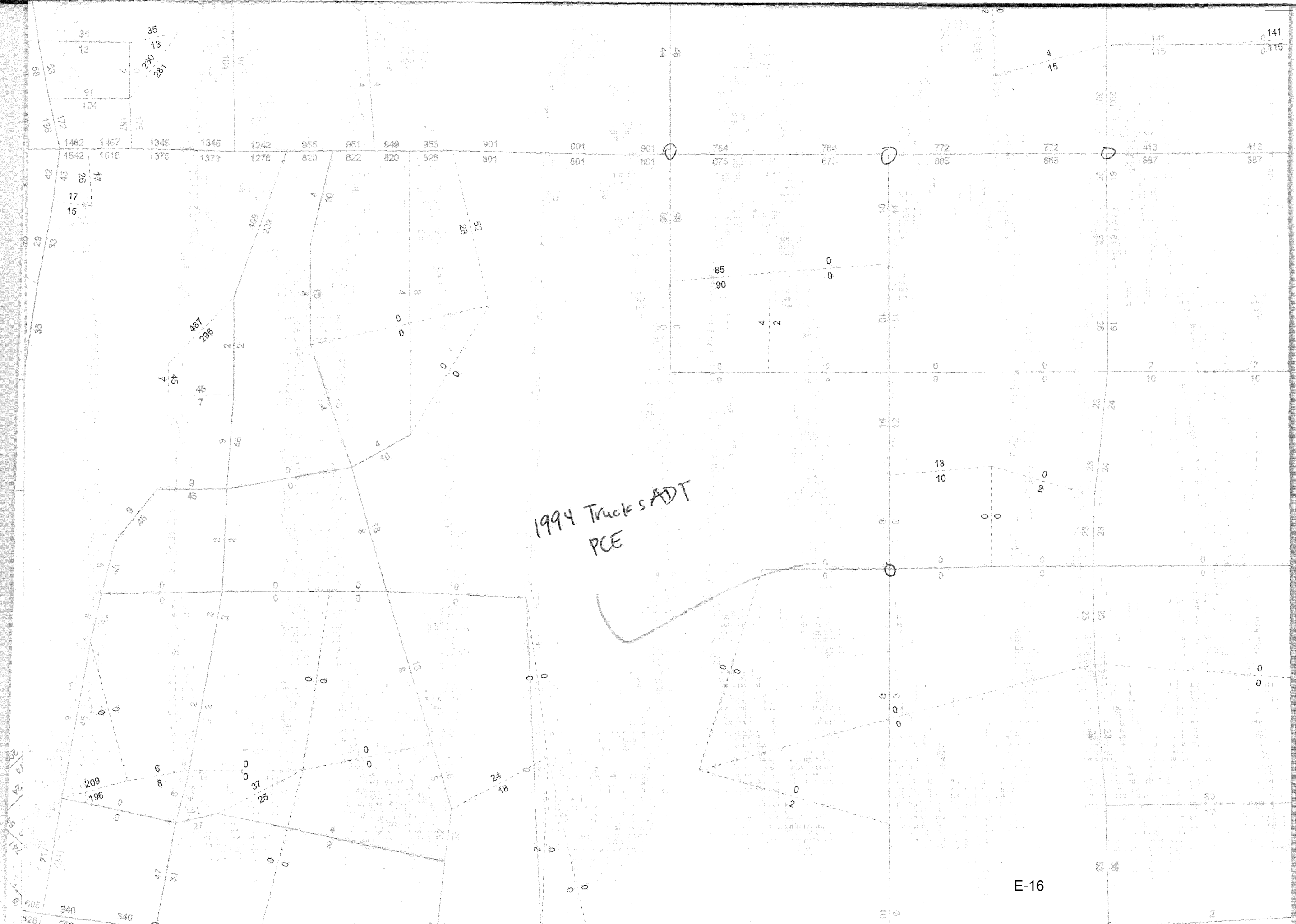
1994
Trucks
PM ✓

1994
Trucks
PM



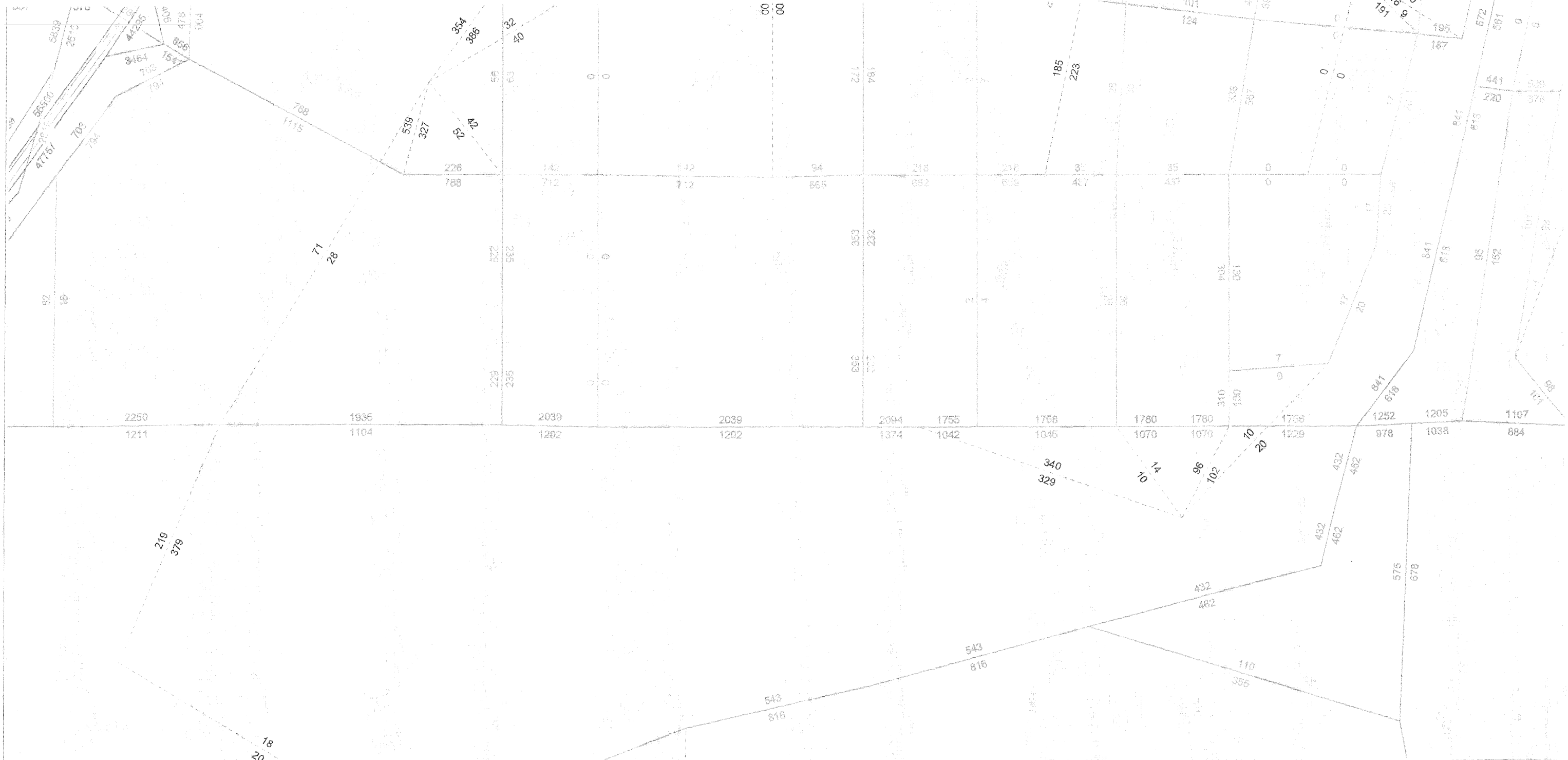


2020
Trucks
PM
Peak per

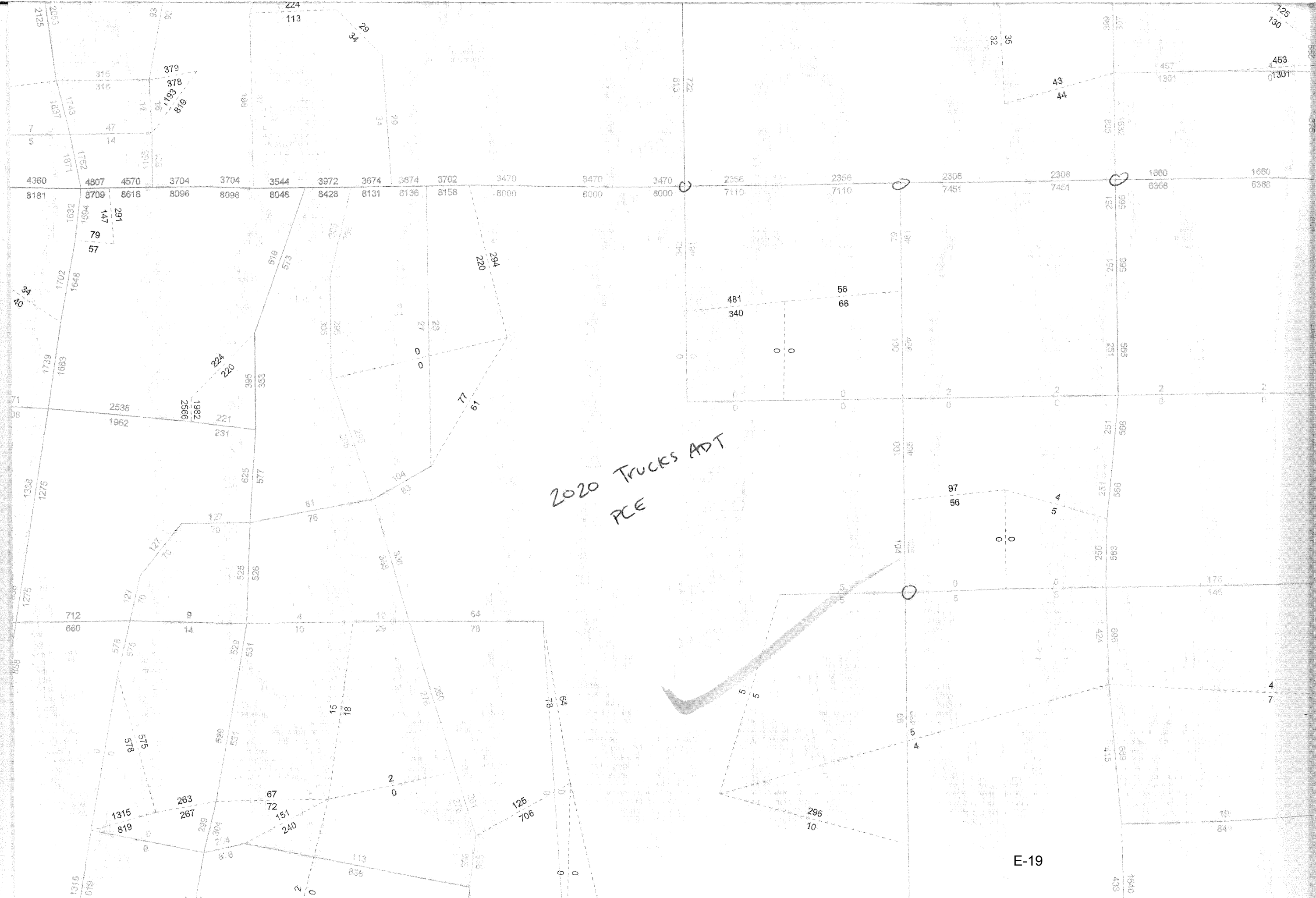


1994 Trucks ADT
PCE

1994 Trucks ADT
PCE



YEAR 2020 TRUCKS, ADT
TRUCKS IN PCES
Viper Software by The Urban Analysis Group

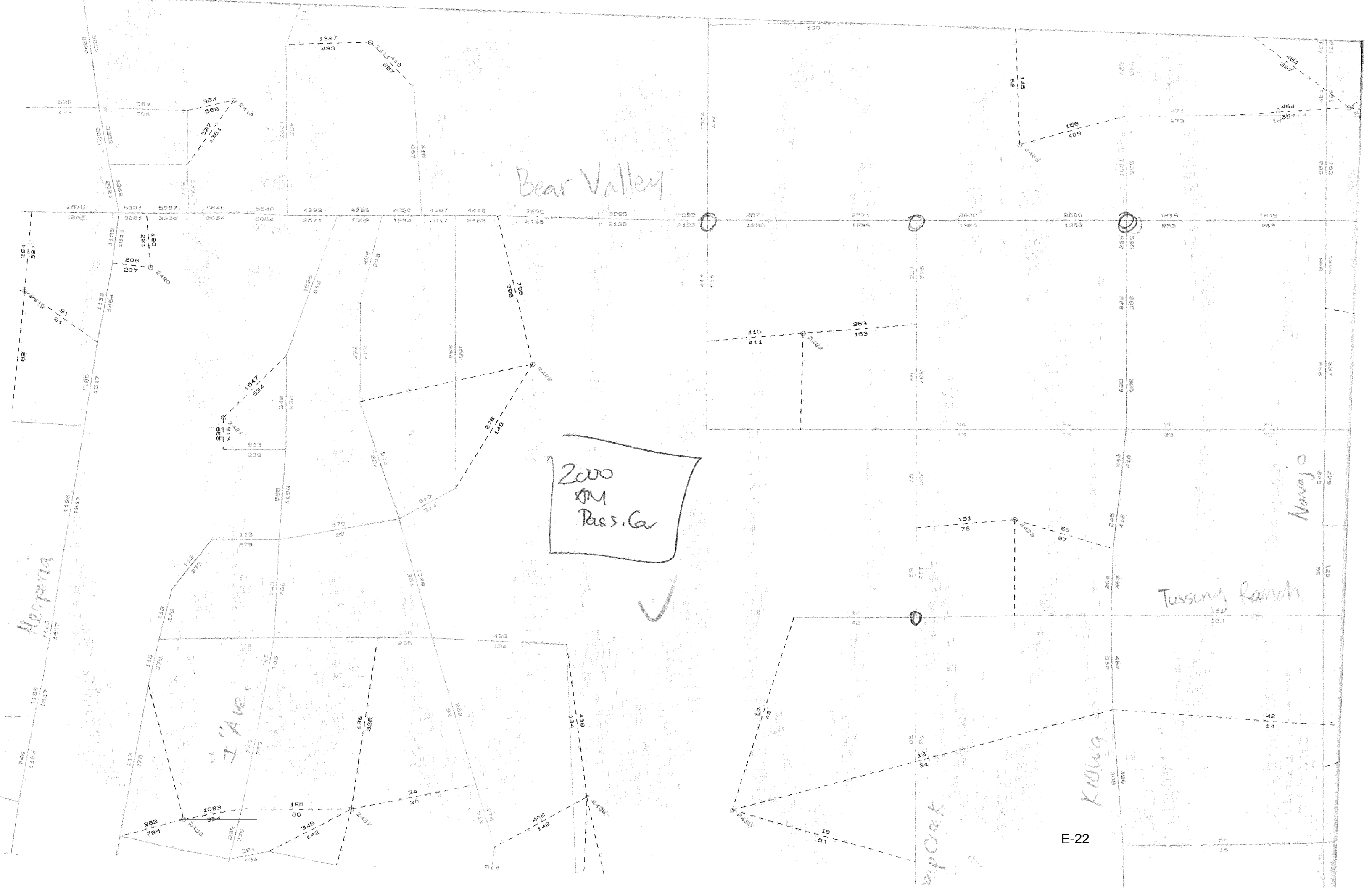


2020 Trucks ADT
PCE

2020 Trucks ADT
PCE



E-21



Bear Valley

2000
ft
Pass. Car

Navajo

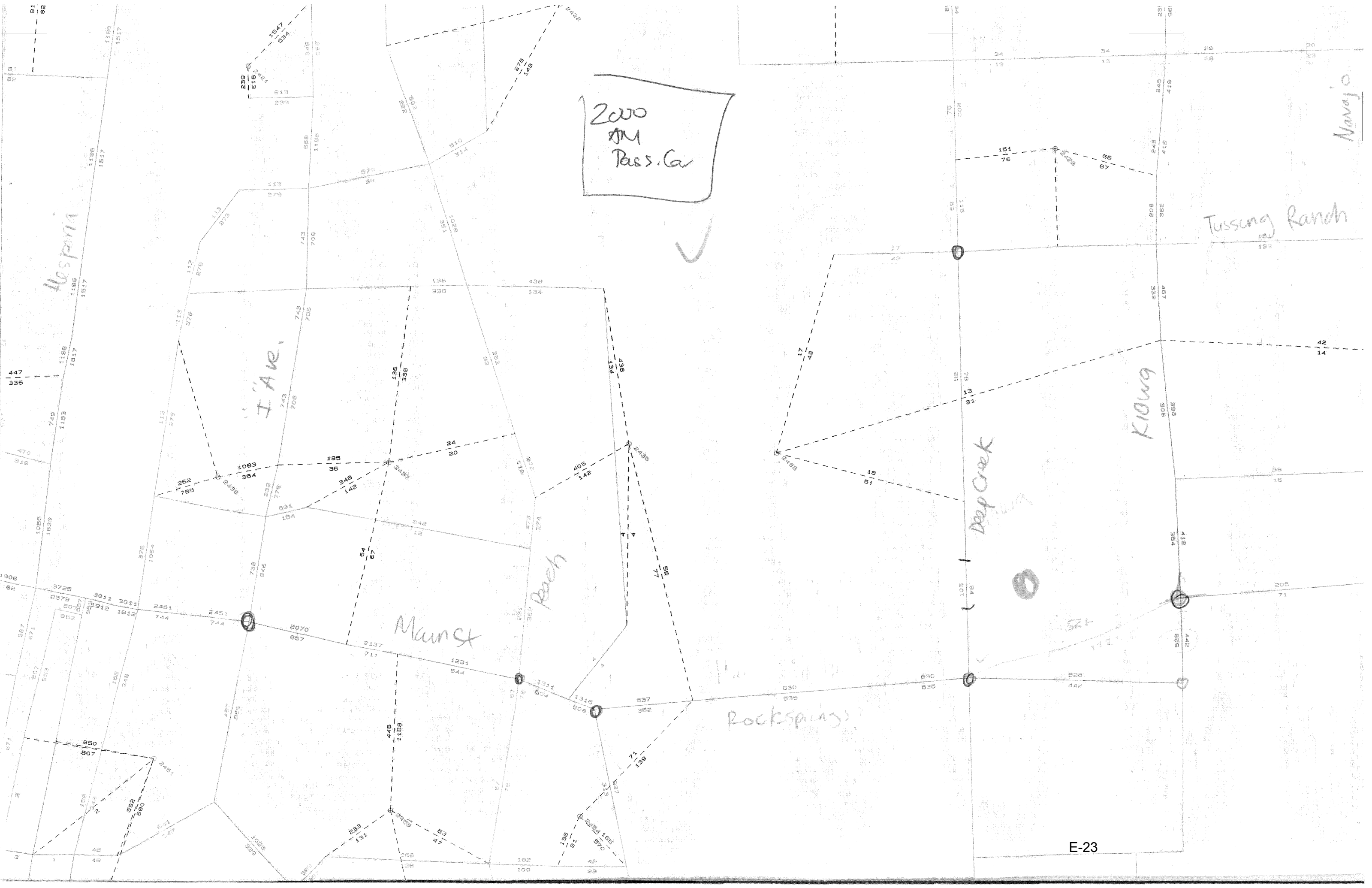
Tussey Ranch

Hesperia

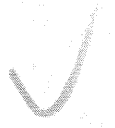
I Ave.

mp Creek

Klong



Zero
Pass. Car



Tussing Ranch

Navajo

I Ave.

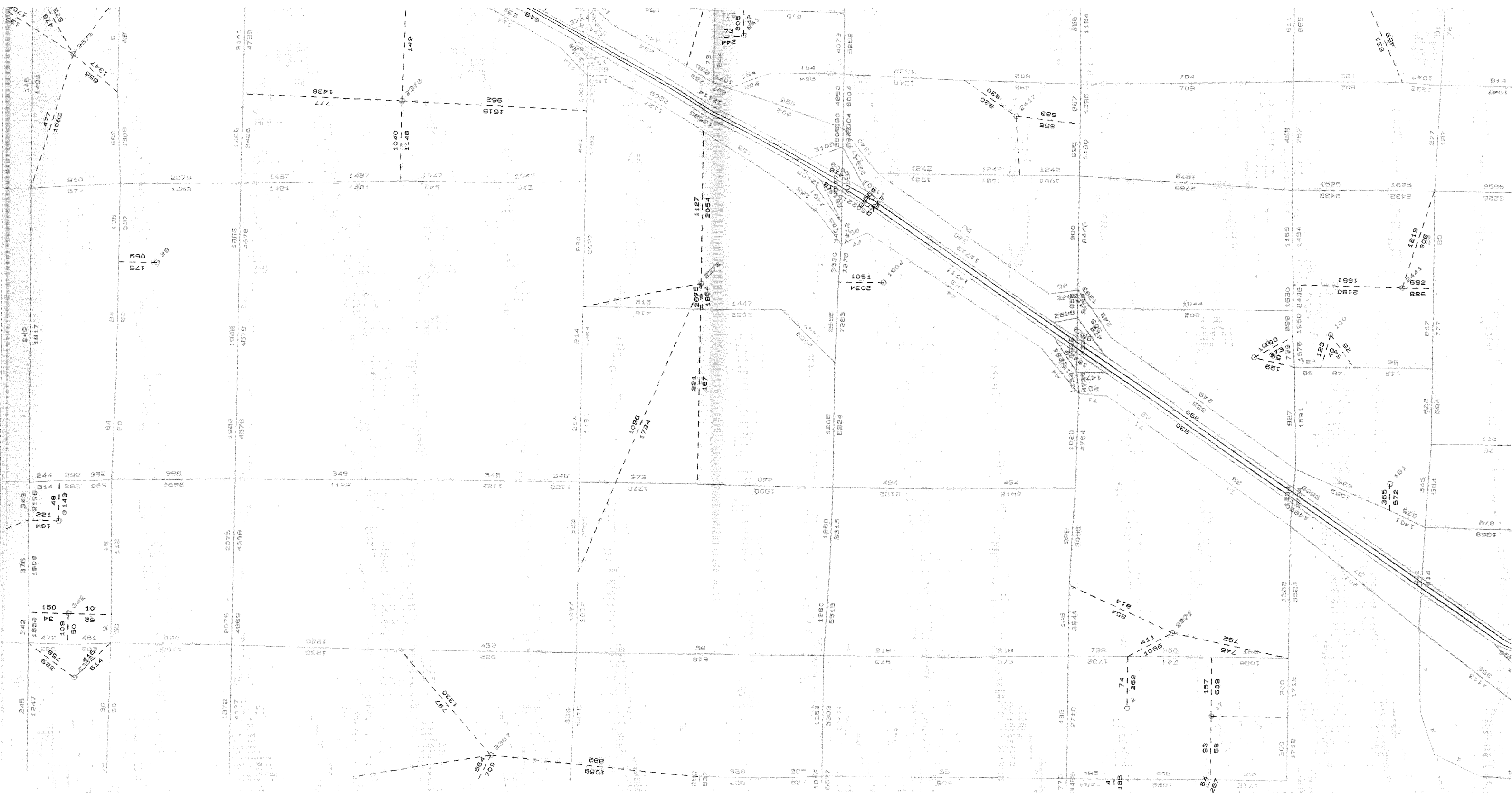
Rock

Main St

Rock Springs

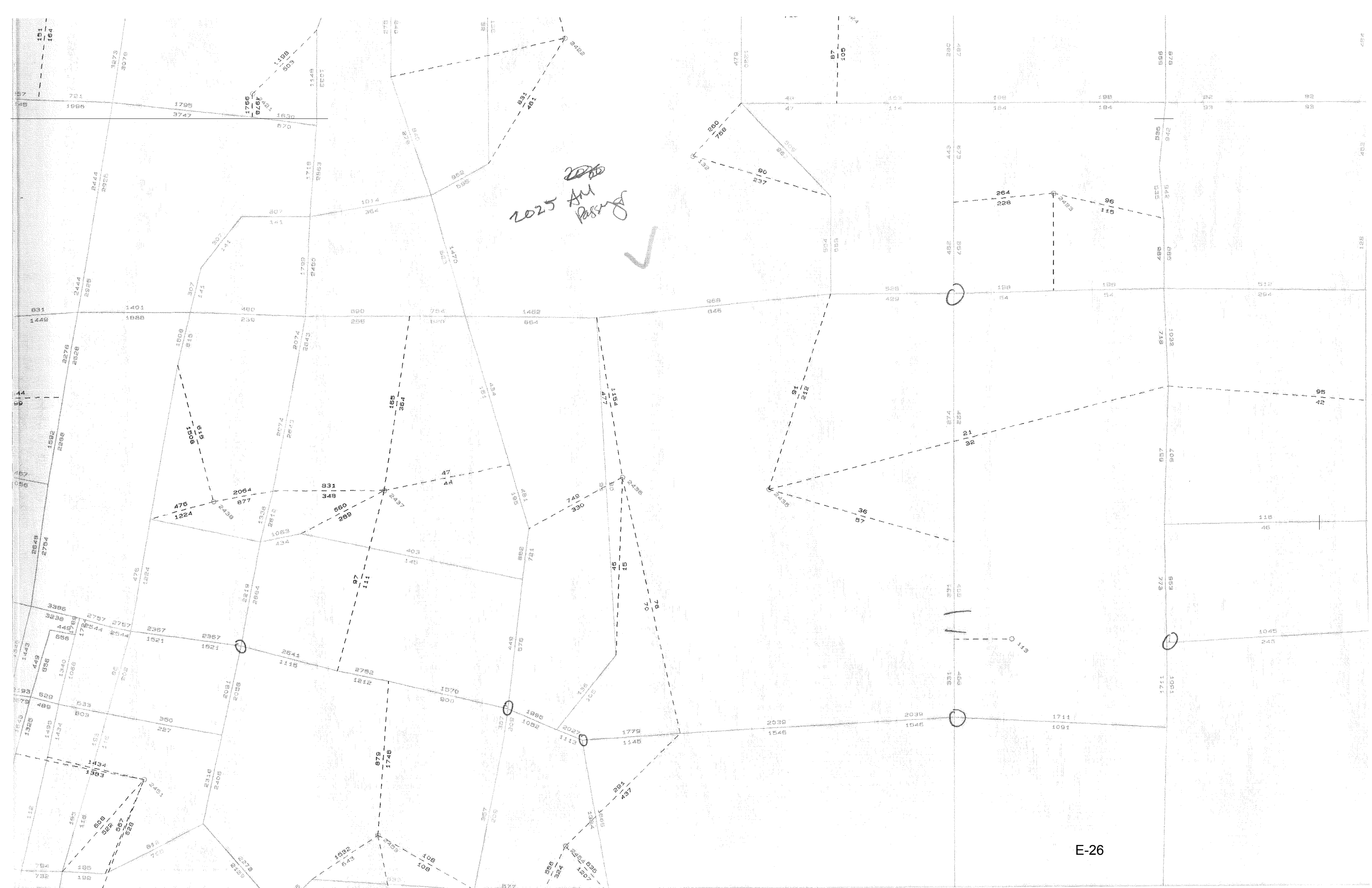
Deep Creek

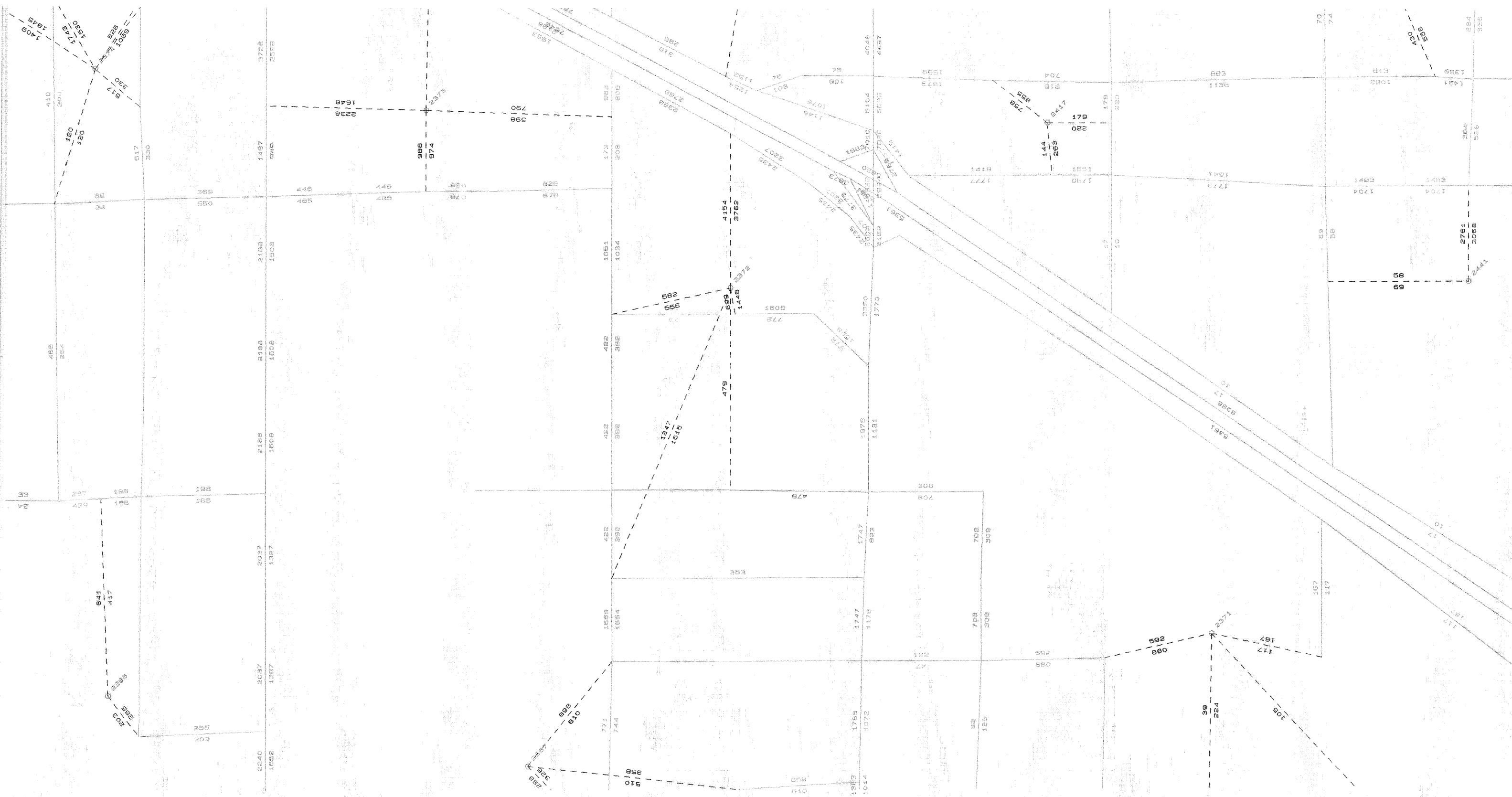
King



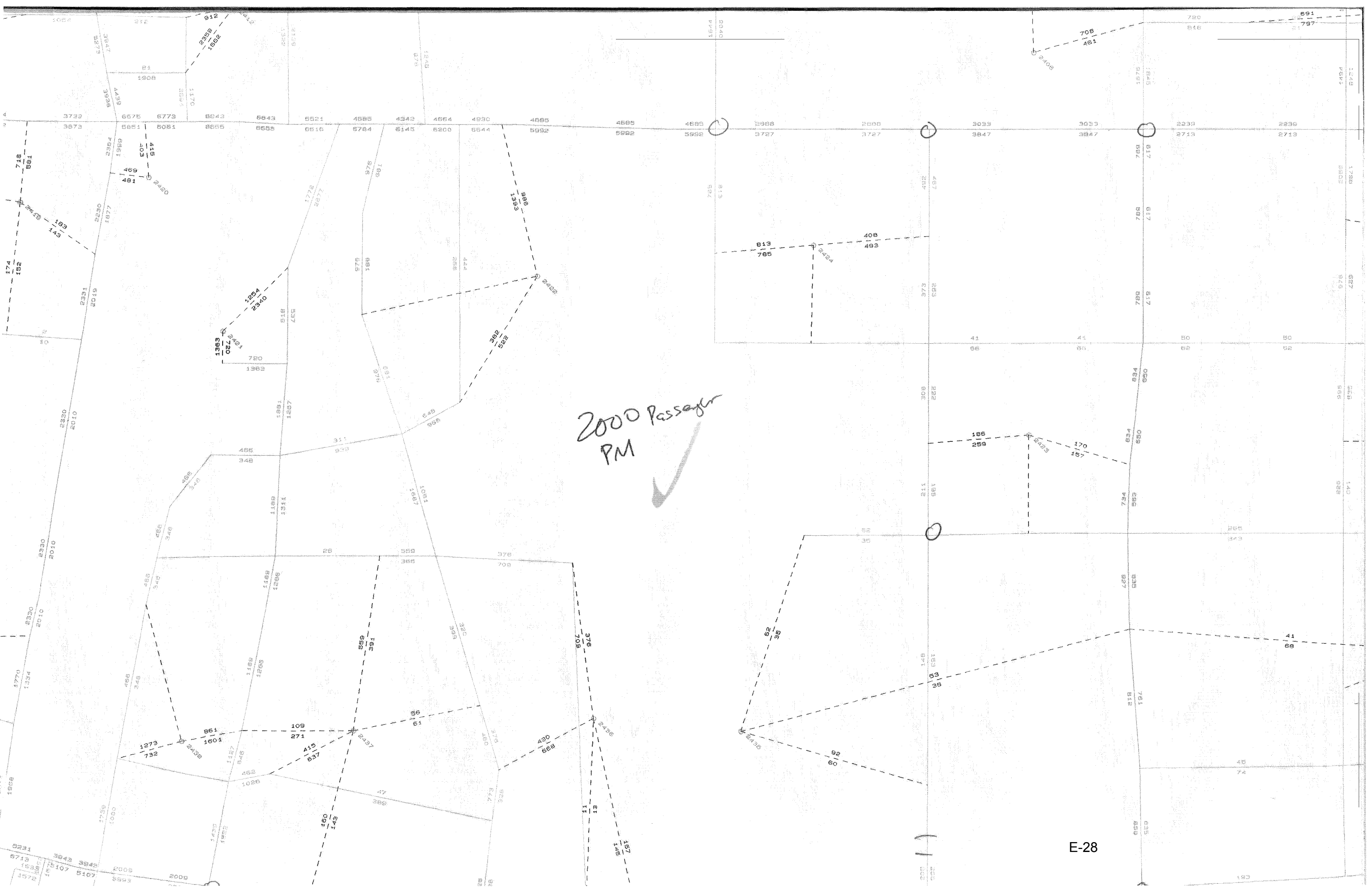
DEEP CREEK (TT 16569), URBAN CROSSROADS, YEAR 2025, AM PK PERIOD
 YEAR 2025 BASE MODEL, W/O PROJECT, AM PEAK PERIOD (3 HOURS), REQ =SB200620
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 13Feb07 14:30:45







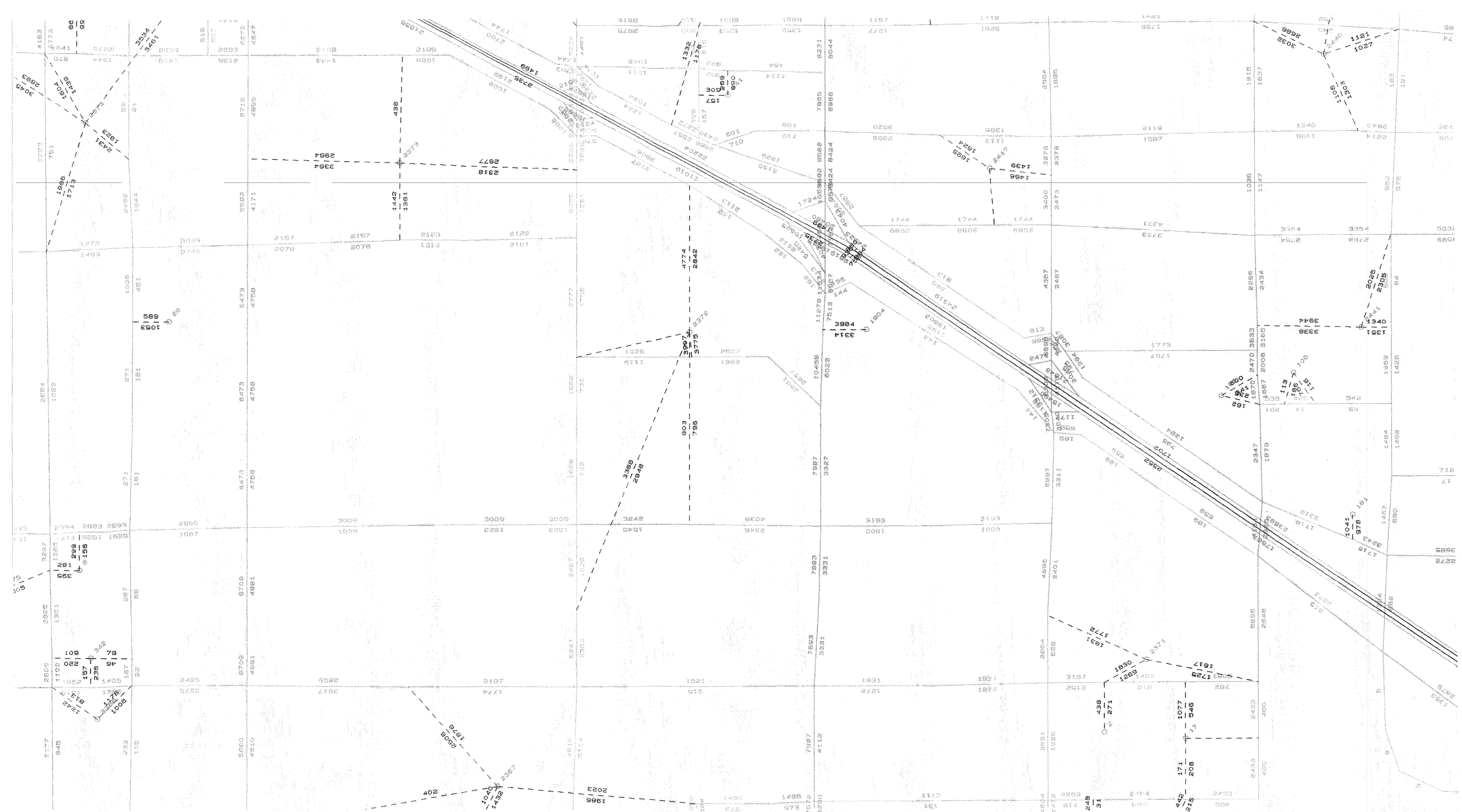
DEEP CREEK (TT 16569), URBAN CROSSROADS, YEAR 2000, PM PK PERIOD
 YEAR 2000 BASE MODEL, W/O PROJECT, PM PEAK PERIOD (4 HOURS), REQ =SB200620
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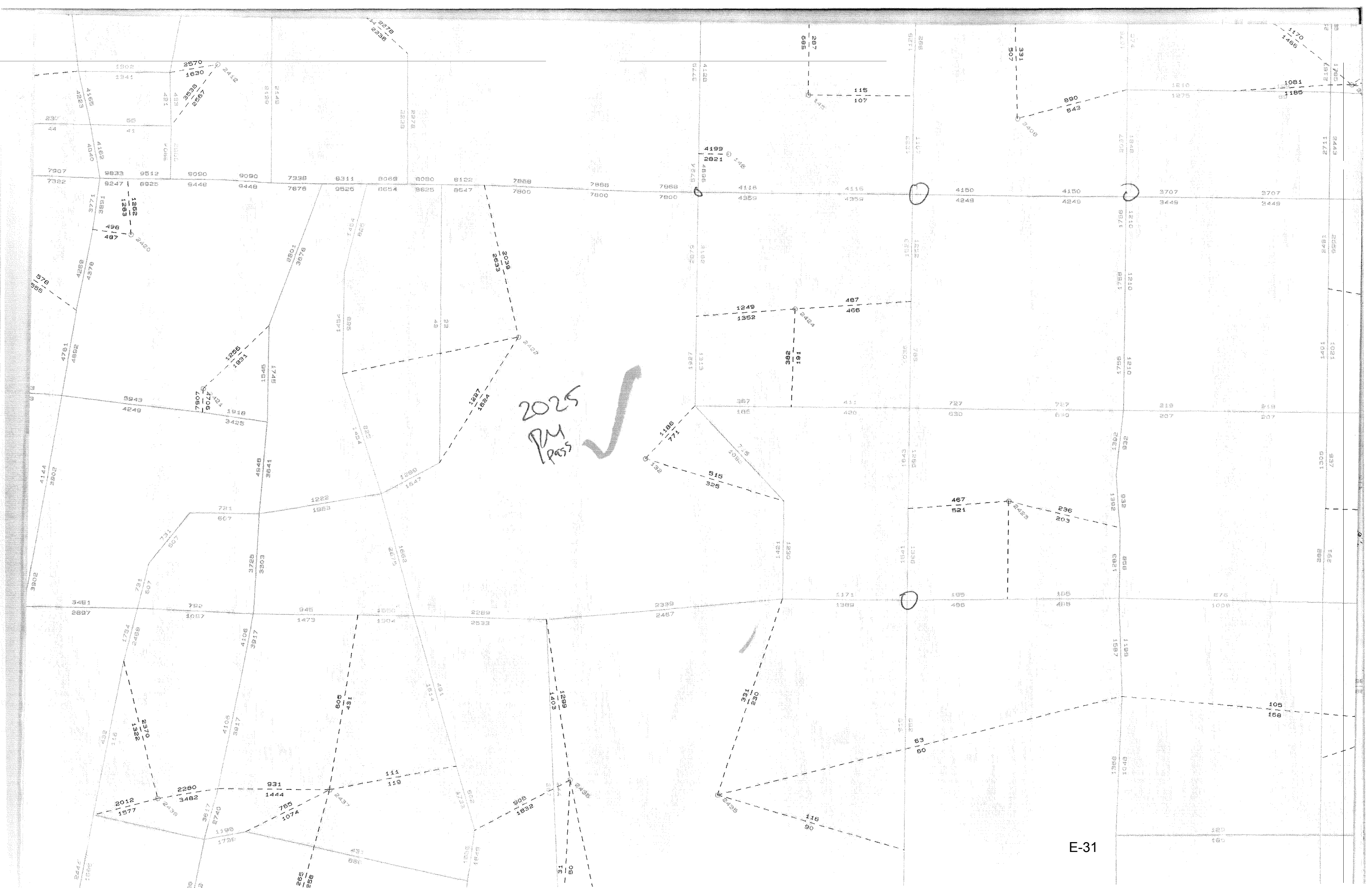


2000 Passenger
PM ✓

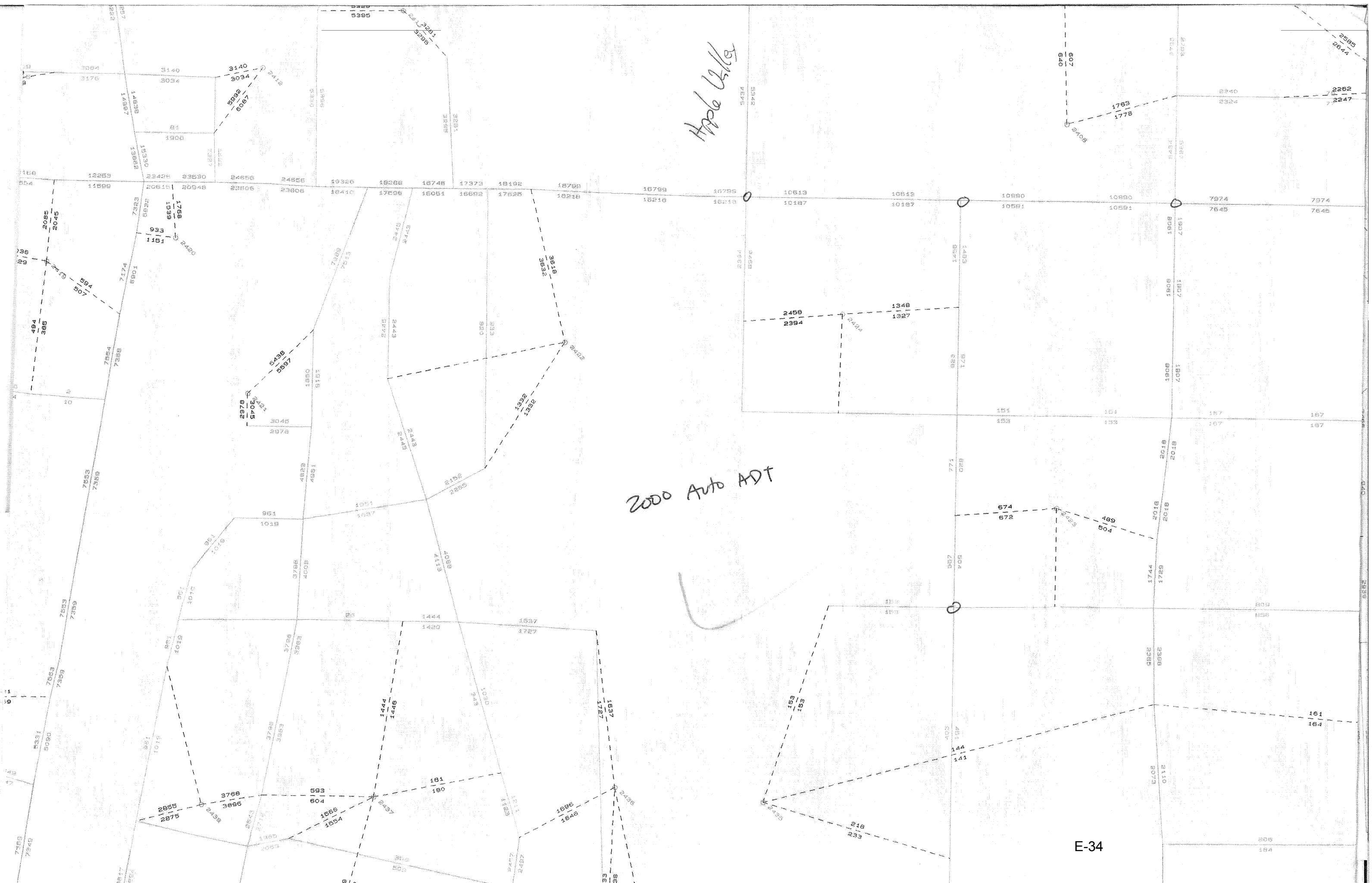
2000 Passenger
PM



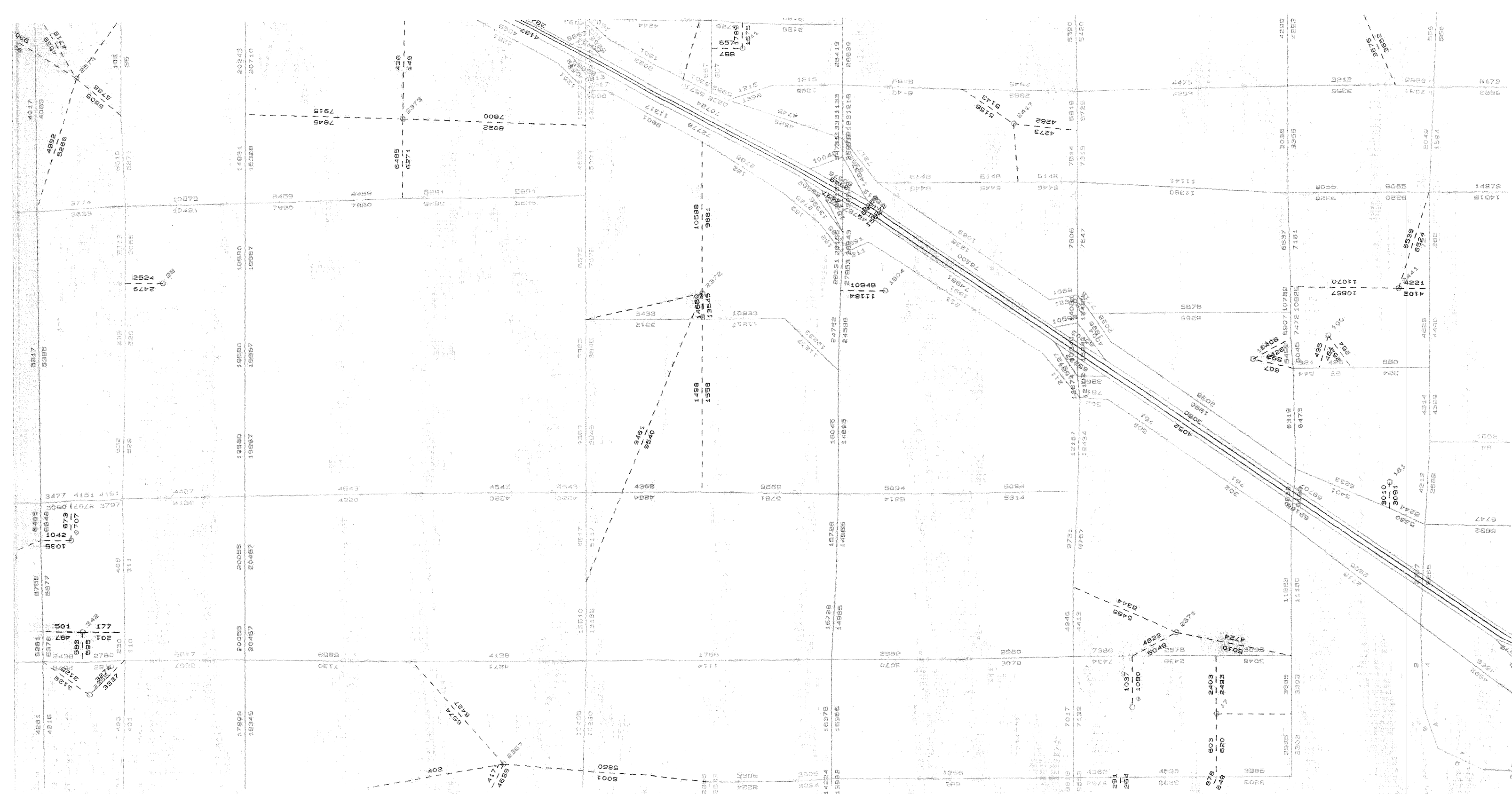




2025
PM
PASS ✓



2000 Auto ADT



DEEP CREEK (TT 16569), URBAN CROSSROADS, YEAR 2025, ADT
YEAR 2025 BASE MODEL, W/O PROJECT, ADT (24 HOURS), REQUEST =SB200620
SOURCE: /p-2/=ctp02/=projects/sb200620/=y25_base
13Feb07 14:30:43



Bear Valley
Apple Valley

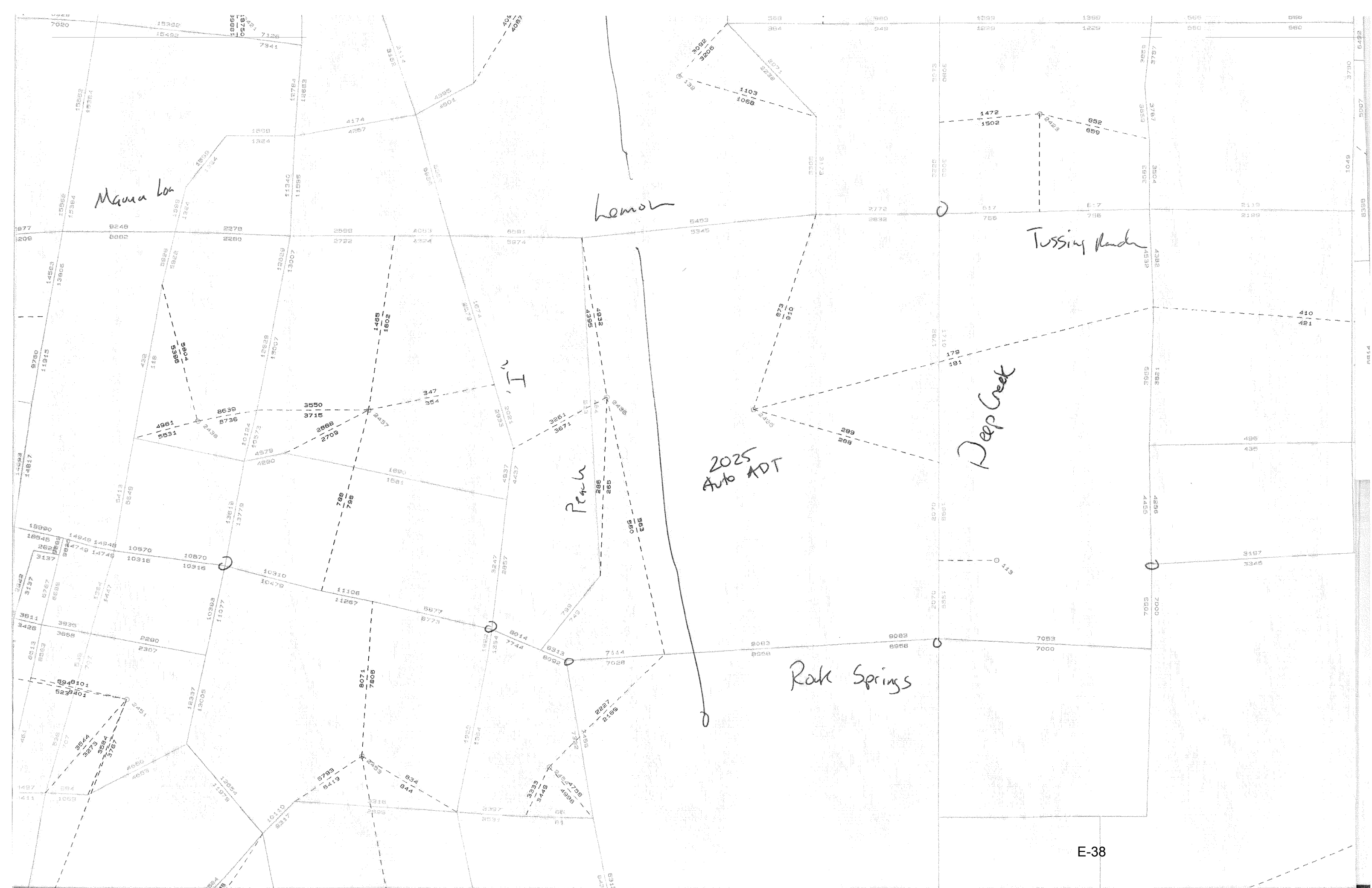
Mama Lo

Lemon

Tussing Ranch

Deep Creek

2025
Auto ADT



APPENDIX F

2030 PEAK HOUR DIRECTIONAL GROWTH INCREMENT
CALCULATIONS AND FUTURE PEAK HOUR INTERSECTION
TURNING MOVEMENT CALCULATIONS

Comprehensive Transportation Plan (CTP) Data Input Sheet

Intersection

Deep Creek Road / Bear Valley Road

AM

	NB (S-Leg)				SB (N-Leg)				EB (W-Leg)				WB (E-Leg)			
	Approach		Departure		Approach		Departure		Approach		Departure		Approach		Departure	
	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck
Existing Count (Vehicles)	109		90		0		0		758		1100		1074		751	
2000 Traffic Model	262		227		0		0		1296		2571		2600		1360	
Factored 2000 Traffic Model (0.38)	100		86		0		0		492		977		988		517	
2000 Truck Model (PCE)		0		8		0		0		117		129		127		109
Factored 2000 Truck Model (0.333)		0		3		0		0		39		43		42		36
2020 Truck Model (PCE)		14		10		0		0		1752		236		229		1749
Factored 2020 Truck Model (0.333)		5		3		0		0		583		79		76		582
2025 Passenger Car Model	724		517		285		598		2425		2934		3015		2400	
Factored 2025 P. Car Model (0.38)	275		196		108		227		922		1115		1146		912	
20 Year Model Growth (Trucks)		5		0		0		0		544		36		34		546
25 Year Model Growth (Passenger)	175		110		108		227		430		138		158		395	
2007 to 2030 Growth (23 Year Weekday Growth)	161	6	101	0	99	0	209	0	396	626	127	41	145	39	363	628
2007 to 2030 Growth (23 Year Weekend Growth)	104	4	66	0	64	0	136	0	257	406	82	27	94	25	236	407
2030 Weekend Forecast (Pass. Car)	213		156		64		136		1015		1182		1168		987	
Total 2030 Forecast	217		156		64		136		1421		1209		1193		1394	

x.65

PM

	NB (S-Leg)				SB (N-Leg)				EB (W-Leg)				WB (E-Leg)			
	Approach		Departure		Approach		Departure		Approach		Departure		Approach		Departure	
	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck
Existing Count (Vehicles)	105		132		0		0		1176		933		949		1165	
2000 Traffic Model	467		492		0		0		3727		2888		3033		3847	
Factored 2000 Traffic Model (0.38)	177		187		0		0		1416		1097		1153		1462	
2000 Truck Model (PCE)		2		0		0		0		142		175		173		142
Factored 2000 Truck Model (0.333)		1		0		0		0		47		58		58		47
2020 Truck Model (PCE)		386		20		0		0		874		431		421		1234
Factored 2020 Truck Model (0.333)		129		7		0		0		291		144		140		411
2025 Passenger Car Model	1252		1523		1233		1107		4359		4116		4150		4249	
Factored 2025 P. Car Model (0.38)	476		579		469		421		1656		1564		1577		1615	
20 Year Model Growth (Trucks)		128		7		0		0		244		86		82		364
25 Year Model Growth (Passenger)	299		392		469		421		240		467		424		153	
2007 to 2030 Growth (23 Year Weekday Growth)	275	147	361	8	431	0	387	0	221	281	430	99	390	94	141	419
2007 to 2030 Growth (23 Year Weekend Growth)	200	107	262	6	313	0	281	0	160	204	312	72	283	68	102	304
2030 Weekend Forecast (Pass. Car)	305		394		313		281		1336		1245		1232		1267	
Total 2030 Forecast	411		400		313		281		1540		1317		1300		1571	

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Deep Creek Road / Bear Valley Road
FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)

YEAR 2030 TRAFFIC CONDITIONS											
AM PEAK HOUR INPUT DATA					PM PEAK HOUR INPUT DATA						
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL		
NORTH BOUND	LEFT	1	SOUTH LEG		NORTH BOUND	LEFT	1	SOUTH LEG			
	THRU	3	IN ...	217		THRU	3	IN ...		411	
	RIGHT	1	OUT ...	156		RIGHT	1	OUT ...		400	
SOUTH BOUND	LEFT	1	NORTH LEG		SOUTH BOUND	LEFT	1	NORTH LEG			
	THRU	3	IN ...	64		THRU	3	IN ...		313	
	RIGHT	1	OUT ...	136		RIGHT	1	OUT ...		281	
EAST BOUND	LEFT	1	WEST LEG		EAST BOUND	LEFT	1	WEST LEG			
	THRU	3	IN ...	1,421		THRU	3	IN ...		1,540	
	RIGHT	1	OUT ...	1,209		RIGHT	1	OUT ...		1,317	
WEST BOUND	LEFT	1	EAST LEG		WEST BOUND	LEFT	1	EAST LEG			
	THRU	3	IN ...	1,193		THRU	3	IN ...		1,300	
	RIGHT	1	OUT ...	1,394		RIGHT	1	OUT ...		1,571	
YEAR 2030 INDIVIDUAL TURN VOLUME GROWTH REVIEW											
AM PEAK HOUR RESULTS						PM PEAK HOUR RESULTS					
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	DIFFERENCE	% CHANGE	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	DIFFERENCE	% CHANGE
NORTH BOUND	LEFT	1	94	93	9340%	NORTH BOUND	LEFT	1	146	145	14458%
	THRU	3	35	32	1061%		THRU	3	104	101	3354%
	RIGHT	1	88	87	8680%		RIGHT	1	162	161	16136%
	NB TOTAL	5	217	212	4241%		NB TOTAL	5	412	407	8131%
SOUTH BOUND	LEFT	1	24	23	2330%	SOUTH BOUND	LEFT	1	107	106	10573%
	THRU	3	14	11	353%		THRU	3	111	108	3599%
	RIGHT	1	26	25	2513%		RIGHT	1	96	95	9470%
	SB TOTAL	5	64	59	1180%		SB TOTAL	5	313	308	6168%
EAST BOUND	LEFT	1	57	56	5552%	EAST BOUND	LEFT	1	92	91	9132%
	THRU	3	1,282	1,279	42630%		THRU	3	1,302	1,299	43297%
	RIGHT	1	80	79	7858%		RIGHT	1	150	149	14941%
	EB TOTAL	5	1,418	1,413	28260%		EB TOTAL	5	1,545	1,540	30793%
WEST BOUND	LEFT	1	63	62	6185%	WEST BOUND	LEFT	1	139	138	13761%
	THRU	3	1,088	1,085	36182%		THRU	3	1,076	1,073	35757%
	RIGHT	1	45	44	4364%		RIGHT	1	85	84	8407%
	WB TOTAL	5	1,196	1,191	23819%		WB TOTAL	5	1,299	1,294	25888%
TOTAL ENTERING VOLUME		20	2,895	2,875	14375%	TOTAL ENTERING VOLUME		20	3,569	3,549	17745%

FORECAST PEAK HOUR TO ADT COMPARISON					
		VOLUMES		PERCENT OF ADT	
		AM	PM	AM	PM
North Leg	Inbound	64	313		
North Leg	Outbound	136	281		
North Leg	TOTAL	200	594	4%	13%
South Leg	Inbound	217	412		
South Leg	Outbound	156	400		
South Leg	TOTAL	373	812	5%	11%
East Leg	Inbound	1,196	1,299		
East Leg	Outbound	1,394	1,571		
East Leg	TOTAL	2,590	2,870	7%	8%
West Leg	Inbound	1,418	1,545		
West Leg	Outbound	1,209	1,317		
West Leg	TOTAL	2,627	2,862	7%	8%
OVERALL TOTAL		5,790	7,138	7%	9%
					82,810

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Modified by: COMSIS Corp. (M. Roskin) 4/8/86

Modified by: FHWA 12/21/87

Modified by: Urban Crossroads Inc. 04/15/04

Comprehensive Transportation Plan (CTP) Data Input Sheet

Intersection

Deep Creek Road / Project Access

AM

	NB (S-Leg)				SB (N-Leg)				EB (W-Leg)				WB (E-Leg)			
	Approach		Departure		Approach		Departure		Approach		Departure		Approach		Departure	
	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck
Existing Count (Vehicles)	91		104		112		91		6		7		7		14	
2000 Traffic Model	94		103		103		94		0		0		0		0	
Factored 2000 Traffic Model (0.38)	36		39		39		36		0		0		0		0	
2000 Truck Model (PCE)		0		4		4		0		0		0		0		0
Factored 2000 Truck Model (0.333)		0		1		1		0		0		0		0		0
2020 Truck Model (PCE)		44		41		41		44								
Factored 2020 Truck Model (0.333)		15		14		14		15		0		0		0		0
2025 Passenger Car Model	458		331		331		458		0		0		0		0	
Factored 2025 P. Car Model (0.38)	174		126		126		174		0		0		0		0	
20 Year Model Growth (Trucks)		15		13		13		15		0		0		0		0
25 Year Model Growth (Passenger)	138		87		87		138		0		0		0		0	
2007 to 2030 Growth (23 Year Weekday Growth)	127	17	80	15	80	15	127	17	0	0	0	0	0	0	0	0
2007 to 2030 Growth (23 Year Weekend Growth)	82	11	52	10	52	10	82	11	0	0	0	0	0	0	0	0
2030 Weekend Forecast (Pass. Car)	173		156		164		173		6		7		7		14	
Total 2030 Forecast	184		166		174		184		6		7		7		14	

x.65

PM

	NB (S-Leg)				SB (N-Leg)				EB (W-Leg)				WB (E-Leg)			
	Approach		Departure		Approach		Departure		Approach		Departure		Approach		Departure	
	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck
Existing Count (Vehicles)	106		123		122		107		2		1		5		4	
2000 Traffic Model	255		208		208		255		0		0		0		0	
Factored 2000 Traffic Model (0.38)	97		79		79		97		0		0		0		0	
2000 Truck Model (PCE)		3		2		2		3		0		0		0		0
Factored 2000 Truck Model (0.333)		1		1		1		1		0		0		0		0
2020 Truck Model (PCE)		481		34		34		481		0		0		0		0
Factored 2020 Truck Model (0.333)		160		11		11		160		0		0		0		0
2025 Passenger Car Model	808		1009		1009		808		0		0		0		0	
Factored 2025 P. Car Model (0.38)	307		383		383		307		0		0		0		0	
20 Year Model Growth (Trucks)		159		10		10		159		0		0		0		0
25 Year Model Growth (Passenger)	210		304		304		210		0		0		0		0	
2007 to 2030 Growth (23 Year Weekday Growth)	193	183	280	12	280	12	193	183	0	0	0	0	0	0	0	0
2007 to 2030 Growth (23 Year Weekend Growth)	140	133	203	9	203	9	140	133	0	0	0	0	0	0	0	0
2030 Weekend Forecast (Pass. Car)	246		326		325		247		2		1		5		4	
Total 2030 Forecast	379		335		334		380		2		1		5		4	

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Deep Creek Road / Project Access
FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)

YEAR 2030 TRAFFIC CONDITIONS											
AM PEAK HOUR INPUT DATA					PM PEAK HOUR INPUT DATA						
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL		
NORTH BOUND	LEFT	0	SOUTH LEG		NORTH BOUND	LEFT	0	SOUTH LEG			
	THRU	87	IN ...	184	BOUND	THRU	102	IN ...	379		
	RIGHT	4	OUT ...	166		RIGHT	4	OUT ...	335		
SOUTH BOUND	LEFT	8	NORTH LEG		SOUTH BOUND	LEFT	0	NORTH LEG			
	THRU	103	IN ...	174	BOUND	THRU	121	IN ...	334		
	RIGHT	1	OUT ...	184		RIGHT	1	OUT ...	380		
EAST BOUND	LEFT	4	WEST LEG		EAST BOUND	LEFT	2	WEST LEG			
	THRU	2	IN ...	6	BOUND	THRU	0	IN ...	2		
	RIGHT	0	OUT ...	7		RIGHT	0	OUT ...	1		
WEST BOUND	LEFT	1	EAST LEG		WEST BOUND	LEFT	2	EAST LEG			
	THRU	6	IN ...	7	BOUND	THRU	0	IN ...	5		
	RIGHT	0	OUT ...	14		RIGHT	3	OUT ...	4		
YEAR 2030 INDIVIDUAL TURN VOLUME GROWTH REVIEW											
AM PEAK HOUR RESULTS						PM PEAK HOUR RESULTS					
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	DIFFERENCE	% CHANGE	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	DIFFERENCE	% CHANGE
NORTH BOUND	LEFT	0	0	0	#DIV/0!	NORTH BOUND	LEFT	0	0	0	#DIV/0!
	THRU	87	179	92	106%	BOUND	THRU	102	375	273	268%
	RIGHT	4	5	1	23%		RIGHT	4	6	2	50%
	NB TOTAL	91	184	93	103%		NB TOTAL	106	381	275	259%
SOUTH BOUND	LEFT	8	11	3	38%	SOUTH BOUND	LEFT	0	0	0	#DIV/0!
	THRU	103	201	98	95%	BOUND	THRU	121	333	212	175%
	RIGHT	1	1	0	26%		RIGHT	1	1	0	0%
	SB TOTAL	112	213	101	90%		SB TOTAL	122	334	212	174%
EAST BOUND	LEFT	4	6	2	50%	EAST BOUND	LEFT	2	2	0	0%
	THRU	2	2	0	0%	BOUND	THRU	0	0	0	#DIV/0!
	RIGHT	0	0	0	#DIV/0!		RIGHT	0	0	0	#DIV/0!
	EB TOTAL	6	8	2	33%		EB TOTAL	2	2	0	0%
WEST BOUND	LEFT	1	1	0	21%	WEST BOUND	LEFT	2	2	0	0%
	THRU	6	8	2	33%	BOUND	THRU	0	0	0	#DIV/0!
	RIGHT	0	0	0	#DIV/0!		RIGHT	3	4	1	33%
	WB TOTAL	7	9	2	32%		WB TOTAL	5	6	1	20%
TOTAL ENTERING VOLUME		216	415	199	92%	TOTAL ENTERING VOLUME		235	723	488	208%

FORECAST PEAK HOUR TO ADT COMPARISON					
		VOLUMES		PERCENT OF ADT	
		AM	PM	AM	PM
North Leg	Inbound	213	334		
North Leg	Outbound	185	381		
North Leg	TOTAL	399	715	6%	11%
South Leg	Inbound	184	381		
South Leg	Outbound	202	335		
South Leg	TOTAL	387	716	6%	11%
East Leg	Inbound	9	6		
East Leg	Outbound	18	6		
East Leg	TOTAL	27	12	14%	6%
West Leg	Inbound	8	2		
West Leg	Outbound	9	1		
West Leg	TOTAL	17	3	8%	1%
OVERALL TOTAL		830	1,446	6%	10%
					13,909

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Modified by: COMSIS Corp. (M. Roskin) 4/8/86

Modified by: FHWA 12/21/87

Modified by: Urban Crossroads Inc. 04/15/04

Comprehensive Transportation Plan (CTP) Data Input Sheet

Intersection

Deep Creek Road / Rock Springs Road

AM

	NB (S-Leg)				SB (N-Leg)				EB (W-Leg)				WB (E-Leg)			
	Approach		Departure		Approach		Departure		Approach		Departure		Approach		Departure	
	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck
Existing Count (Vehicles)	44		30		101		91		216		320		237		157	
2000 Traffic Model	0		0		103		94		535		630		528		442	
Factored 2000 Traffic Model (0.38)	0		0		39		36		203		239		201		168	
2000 Truck Model (PCE)		2		4		4		0		6		19		13		2
Factored 2000 Truck Model (0.333)		1		1		1		0		2		6		4		1
2020 Truck Model (PCE)		5		0		41		44		276		302		258		233
Factored 2020 Truck Model (0.333)		2		0		14		15		92		101		86		78
2025 Passenger Car Model	0		0		331		458		1546		2039		1711		1091	
Factored 2025 P. Car Model (0.38)	0		0		126		174		587		775		650		415	
20 Year Model Growth (Trucks)		1		-1		13		15		90		95		82		77
25 Year Model Growth (Passenger)	0		0		87		138		384		536		449		247	
2007 to 2030 Growth (23 Year Weekday Growth)	0	1	0	-1	80	15	127	17	353	104	493	109	413	94	227	89
2007 to 2030 Growth (23 Year Weekend Growth)	0	1	0	-1	52	10	82	11	229	67	320	71	268	61	147	58
2030 Weekend Forecast (Pass. Car)	44		30		153		173		445		640		505		304	
Total 2030 Forecast	45		29		163		184		513		711		566		362	

x.65

PM

	NB (S-Leg)				SB (N-Leg)				EB (W-Leg)				WB (E-Leg)			
	Approach		Departure		Approach		Departure		Approach		Departure		Approach		Departure	
	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck	Pass. Car	Truck
Existing Count (Vehicles)	54		61		127		106		349		302		210		271	
2000 Traffic Model	0		0		208		255		1353		1173		971		1104	
Factored 2000 Traffic Model (0.38)	0		0		79		97		514		446		369		420	
2000 Truck Model (PCE)		2		2		2		3		28		19		15		23
Factored 2000 Truck Model (0.333)		1		1		1		1		9		6		5		8
2020 Truck Model (PCE)		0		6		34		481		1354		140		109		872
Factored 2020 Truck Model (0.333)		0		2		11		160		451		47		36		290
2025 Passenger Car Model	0		0		1009		808		3806		3292		2292		3008	
Factored 2025 P. Car Model (0.38)	0		0		383		307		1446		1251		871		1143	
20 Year Model Growth (Trucks)		-1		1		10		159		442		41		31		282
25 Year Model Growth (Passenger)	0		0		304		210		932		805		502		723	
2007 to 2030 Growth (23 Year Weekday Growth)	0	-1	0	1	280	12	193	183	857	508	741	47	462	36	665	324
2007 to 2030 Growth (23 Year Weekend Growth)	0	-1	0	1	203	9	140	133	622	369	538	34	335	26	483	235
2030 Weekend Forecast (Pass. Car)	54		61		330		246		971		840		545		754	
Total 2030 Forecast	53		62		339		379		1339		874		571		989	

x.73

= requires data

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Deep Creek Road / Rock Springs Road
FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)

YEAR 2030 TRAFFIC CONDITIONS										
AM PEAK HOUR INPUT DATA					PM PEAK HOUR INPUT DATA					
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	
NORTH BOUND	LEFT	19	SOUTH LEG		NORTH BOUND	LEFT	28	SOUTH LEG		
	THRU	19	IN ...	45		THRU	16	IN ...	53	
	RIGHT	6	OUT ...	29		RIGHT	10	OUT ...	62	
SOUTH BOUND	LEFT	7	NORTH LEG		SOUTH BOUND	LEFT	18	NORTH LEG		
	THRU	11	IN ...	163		THRU	17	IN ...	339	
	RIGHT	83	OUT ...	184		RIGHT	92	OUT ...	379	
EAST BOUND	LEFT	57	WEST LEG		EAST BOUND	LEFT	77	WEST LEG		
	THRU	144	IN ...	513		THRU	243	IN ...	1,339	
	RIGHT	15	OUT ...	711		RIGHT	29	OUT ...	874	
WEST BOUND	LEFT	4	EAST LEG		WEST BOUND	LEFT	15	EAST LEG		
	THRU	218	IN ...	566		THRU	182	IN ...	571	
	RIGHT	15	OUT ...	362		RIGHT	13	OUT ...	989	
YEAR 2030 INDIVIDUAL TURN VOLUME GROWTH REVIEW										
AM PEAK HOUR RESULTS						PM PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	DIFFERENCE	% CHANGE	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	DIFFERENCE
NORTH BOUND	LEFT	19	25	6	32%	NORTH BOUND	LEFT	28	37	9
	THRU	19	25	6	32%		THRU	16	22	6
	RIGHT	6	8	2	33%		RIGHT	10	13	3
	NB TOTAL	44	58	14	32%		NB TOTAL	54	72	18
SOUTH BOUND	LEFT	7	17	10	143%	SOUTH BOUND	LEFT	18	36	18
	THRU	11	15	4	36%		THRU	17	23	6
	RIGHT	83	166	83	100%		RIGHT	92	296	204
	SB TOTAL	101	198	97	96%		SB TOTAL	127	356	229
EAST BOUND	LEFT	57	140	83	145%	EAST BOUND	LEFT	77	338	261
	THRU	144	348	204	141%		THRU	243	945	702
	RIGHT	15	18	3	21%		RIGHT	29	40	11
	EB TOTAL	216	505	289	134%		EB TOTAL	349	1,324	975
WEST BOUND	LEFT	4	6	2	50%	WEST BOUND	LEFT	15	20	5
	THRU	218	540	322	148%		THRU	182	545	363
	RIGHT	15	28	13	84%		RIGHT	13	28	15
	WB TOTAL	237	574	337	142%		WB TOTAL	210	592	382
TOTAL ENTERING VOLUME		598	1,335	737	123%	TOTAL ENTERING VOLUME		740	2,343	1,603
										217%

FORECAST PEAK HOUR TO ADT COMPARISON					
		VOLUMES		PERCENT OF ADT	
		AM	PM	AM	PM
North Leg	Inbound	198	356		
North Leg	Outbound	192	388		
North Leg	TOTAL	390	743	6%	11%
South Leg	Inbound	58	72		
South Leg	Outbound	39	83		
South Leg	TOTAL	97	155	7%	11%
East Leg	Inbound	574	592		
East Leg	Outbound	373	995		
East Leg	TOTAL	946	1,587	6%	10%
West Leg	Inbound	505	1,324		
West Leg	Outbound	731	878		
West Leg	TOTAL	1,237	2,202	8%	14%
OVERALL TOTAL		2,670	4,687	7%	11%
					40,795

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 Modified by: COMSIS Corp. (M. Roskin) 4/8/86
 Modified by: FHWA 12/21/87
 Modified by: Urban Crossroads Inc. 04/15/04

APPENDIX G

2014 PEAK HOUR DIRECTIONAL GROWTH INCREMENT CALCULATIONS

FUTURE AM VOLUME CALCULATIONS

RAW 2030

Int Num	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
1	94	35	88	24	14	26	57	1282	80	63	1088	45	2895
2	0	179	5	8	165	1	5	2	0	1	6	0	372
3	23	19	6	9	11	148	140	348	18	4	540	28	1293

EXIST (2007 VOLS)

1	64	0	45	0	0	0	0	706	52	38	1036	0	1941
2	0	87	4	8	103	1	4	2	0	1	6	0	216
3	19	19	6	7	11	83	57	144	15	4	218	15	598

(DELTA/23)*7 years

1	9	11	13	7	4	8	17	175	8	8	16	14	290
2	0	28	0	0	19	0	0	0	0	0	0	0	48
3	1	0	0	1	0	20	25	62	1	0	98	4	212

2014 WITH INTERPOLATION

1	73	0	58	0	0	0	0	881	60	46	1052	0	2170
2	0	115	4	8	122	1	4	2	0	1	6	0	264
3	20	19	6	8	11	103	82	206	16	4	316	19	810

2014 WITH CUMU METHOD

1	98	0	65	0	0	0	0	1074	70	55	1792	0	3154
2	0	126	5	10	183	1	5	2	0	1	7	0	340
3	23	23	7	15	14	151	87	187	18	5	297	20	847

FINAL 2014 WOP WITH INTERPOLATION COMPARED WITH CUMU

1	98	0	65	0	0	0	0	1074	70	55	1792	0	3154
2	0	126	5	10	183	1	5	2	0	1	7	0	340
3	23	23	7	15	14	151	87	206	18	5	316	20	885

FINAL 2030 WOP ADJUSTED (COMPARE WITH FINAL 2014 WOP)

1	94	35	88	24	14	26	57	1282	80	63	1088	45	2895
2	0	179	6	11	201	1	6	2	0	1	8	0	415
3	25	25	8	17	15	166	140	348	18	6	540	28	1335

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FUTURE AM VOLUME CALCULATIONS

RAW 2030

Int Num	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
1	146	104	162	107	111	96	92	1302	150	139	1076	85	3569
2	0	375	4	0	333	1	2	0	0	2	0	3	720
3	33	16	10	36	17	296	338	945	40	15	545	28	2319

EXIST (2007 VOLS)

1	50	0	55	0	0	0	0	1110	66	66	883	0	2230
2	0	102	4	0	121	1	2	0	0	2	0	3	235
3	28	16	10	18	17	92	77	243	29	15	182	13	740

(DELTA/23)*7 years

1	29	32	33	32	34	29	28	58	26	22	59	26	408
2	0	83	0	0	65	0	0	0	0	0	0	0	148
3	1	0	0	6	0	62	80	214	3	0	110	4	481

2014 WITH INTERPOLATION

1	79	0	88	0	0	0	0	1168	92	88	942	0	2457
2	0	185	4	0	186	1	2	0	0	2	0	3	383
3	29	16	10	24	17	154	157	457	32	15	292	17	1221

2014 WITH CUMU METHOD

1	75	0	81	0	0	0	0	2090	105	96	1520	0	3967
2	0	197	5	0	190	1	2	0	0	2	0	4	401
3	34	20	12	27	21	149	158	336	36	18	245	25	1081

FINAL 2014 WITH INTERPOLATION COMPARED WITH CUMU

1	79	0	88	0	0	0	0	2090	105	96	1520	0	3978
2	0	197	5	0	190	1	2	0	0	2	0	4	401
3	34	20	12	27	21	154	158	457	36	18	292	25	1254

2030 ADJUSTED (COMPARE WITH FINAL 2014 WOP)

1	146	104	162	107	111	96	92	1302	150	139	1076	85	3569
2	0	375	6	0	333	1	2	0	0	2	0	4	723
3	37	22	13	36	23	296	338	945	40	20	545	28	2344

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APPENDIX H

2014 INTERIM YEAR WITHOUT PROJECT CONDITIONS
INTERSECTION ANALYSIS
(WITHOUT AND WITH IMPROVEMENTS)

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
Interim Year Without Project Weekend Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #101 Deep Creek Rd. (NS) / Bear Valley Rd. (EW)

Average Delay (sec/veh): 91.9 Worst Case Level Of Service: F[1575.8]

Deep Creek Rd. (NS)						Bear Valley Rd. (EW)										
North Bound			South Bound			East Bound			West Bound							
Approach:	L	T	R	L	T	R	L	T	R	L	T	R				
Movement:																
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled						
Rights:	Include			Include			Include			Include						
Lanes:	0	0	1	0	0	0	0	0	2	0	1	1	0	2	0	0

Volume Module:												
Base Vol:	98	0	65	0	0	0	0	1074	70	55	1792	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	98	0	65	0	0	0	0	1074	70	55	1792	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.80	0.80	0.80	1.00	1.00	1.00	0.94	0.94	0.94	0.88	0.88	0.88
PHF Volume:	123	0	82	0	0	0	0	1146	75	63	2036	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	123	0	82	0	0	0	0	1146	75	63	2036	0

Critical Gap Module:												
Critical Gp:	6.8	6.5	6.9	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	4.1	xxxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	2.2	xxxxx	xxxxx

Capacity Module:												
Cnflct Vol:	2289	3308	573	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	1221	xxxxx	xxxxx
Potent Cap.:	34	9	468	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	578	xxxxx	xxxxx
Move Cap.:	31	8	468	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	578	xxxxx	xxxxx
Volume/Cap:	3.95	0.00	0.17	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.11	xxxxx	xxxxx

Level Of Service Module:												
2Way95thQ:	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx
Control Del:	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	12.0	xxxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxxx	50	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Shared Queue:	xxxxx	22.8	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Shrd ConDel:	xxxxx	1576	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Shared LOS:	*	F	*	*	*	*	*	*	*	*	*	*
ApproachDel:	1575.8			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	F			*			*			*		

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
Interim Year Without Project Weekend Conditions WIMP
AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

```

*****
Intersection #101 Deep Creek Rd. (NS) / Bear Valley Rd. (EW)
*****
Cycle (sec):          120          Critical Vol./Cap.(X):          0.781
Loss Time (sec):       6 (Y+R=4.0 sec)  Average Delay (sec/veh):          16.1
Optimal Cycle:         60          Level Of Service:          B
*****
Street Name:          Deep Creek Rd. (NS)          Bear Valley Rd. (EW)
Approach:              North Bound          South Bound          East Bound          West Bound
Movement:              L - T - R          L - T - R          L - T - R          L - T - R
-----|-----|-----|-----|
Control:               Permitted          Permitted          Protected          Protected
Rights:                Include          Include          Include          Include
Min. Green:            26    0    26          0    0    0          0    14    14          10    14    0
Lanes:                 0    0    1! 0    0          0    0    0    0    0          0    0    2    0    1          1    0    2    0    0
-----|-----|-----|-----|
Volume Module:
Base Vol:              98    0    65          0    0    0          0 1074    70          55 1792    0
Growth Adj:            1.00 1.00 1.00          1.00 1.00 1.00          1.00 1.00 1.00          1.00 1.00 1.00
Initial Bse:           98    0    65          0    0    0          0 1074    70          55 1792    0
Added Vol:              0    0    0          0    0    0          0    0    0          0    0    0    0
PasserByVol:           0    0    0          0    0    0          0    0    0          0    0    0    0
Initial Fut:           98    0    65          0    0    0          0 1074    70          55 1792    0
User Adj:              1.00 1.00 1.00          1.00 1.00 1.00          1.00 1.00 1.00          1.00 1.00 1.00
PHF Adj:               0.80 0.80 0.80          1.00 1.00 1.00          0.94 0.94 0.94          0.88 0.88 0.88
PHF Volume:            123    0    82          0    0    0          0 1146    75          63 2036    0
Reduct Vol:             0    0    0          0    0    0          0    0    0          0    0    0    0
Reduced Vol:           123    0    82          0    0    0          0 1146    75          63 2036    0
PCE Adj:               1.00 1.00 1.00          1.00 1.00 1.00          1.00 1.00 1.00          1.00 1.00 1.00
MLF Adj:               1.00 1.00 1.00          1.00 1.00 1.00          1.00 1.05 1.00          1.00 1.05 1.00
FinalVolume:           123    0    82          0    0    0          0 1204    75          63 2138    0
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:              1800 1800 1800          1800 1800 1800          1800 1800 1800          1800 1800 1800
Adjustment:            0.77 1.00 0.77          1.00 1.00 1.00          1.00 1.00 0.85          0.95 1.00 1.00
Lanes:                 0.60 0.00 0.40          0.00 0.00 0.00          0.00 2.00 1.00          1.00 2.00 0.00
Final Sat.:            832    0    552          0    0    0          0 3600    1530          1710 3600    0
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:               0.15 0.00 0.15          0.00 0.00 0.00          0.00 0.33 0.05          0.04 0.59 0.00
Crit Moves:           ****                      ****                      ****
Green/Cycle:           0.22 0.00 0.22          0.00 0.00 0.00          0.00 0.59 0.59          0.15 0.73 0.00
Volume/Cap:            0.68 0.00 0.68          0.00 0.00 0.00          0.00 0.57 0.08          0.25 0.81 0.00
Delay/Veh:             49.6 0.0 49.6          0.0 0.0 0.0          0.0 15.7 10.8          45.9 12.5 0.0
User DelAdj:           1.00 1.00 1.00          1.00 1.00 1.00          1.00 1.00 1.00          1.00 1.00 1.00
AdjDel/Veh:            49.6 0.0 49.6          0.0 0.0 0.0          0.0 15.7 10.8          45.9 12.5 0.0
LOS by Move:           D    A    D          A    A    A          A    B    B          D    B    A
HCM2kAvgQ:              8    0    8          0    0    0          0    14    1          2    27    0
*****

```

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
Interim Year Without Project Weekend Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #102 Deep Creek Road (NS) / Project Access [Outpost Rd.] (EW)

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B[11.6]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0

Volume Module:

Base Vol:	0	126	5	10	183	1	5	2	0	1	7	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	126	5	10	183	1	5	2	0	1	7	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.85	0.85	0.85	0.75	0.75	0.75	0.75	0.75	0.75
PHF Volume:	0	135	5	12	216	1	7	3	0	1	9	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	0	135	5	12	216	1	7	3	0	1	9	0

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	xxxxx	7.1	6.5	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	xxxxx	3.5	4.0	xxxxx

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	140	xxxx	xxxxx	382	380	xxxxx	379	378	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	1456	xxxx	xxxxx	579	555	xxxxx	582	557	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	1456	xxxx	xxxxx	568	551	xxxxx	577	552	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	0.01	0.00	xxxx	0.00	0.02	xxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	563	xxxx	xxxxx	555	xxxx	xxxxx			
Shared Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.5	xxxx	xxxxx	11.6	xxxx	xxxxx			
Shared LOS:	*	*	*	*	*	*	B	*	*	B	*	*			
ApproachDel:	xxxxxxx			xxxxxxx			11.5			11.6					
ApproachLOS:	*			*			B			B					

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
Interim Year Without Project Weekend Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #103 Deep Creek Rd. (NS) / Rock Springs Rd. (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.270

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 15.8

Optimal Cycle: 60 Level Of Service: B

Street Name: Deep Creek Rd. (NS) Rock Springs Rd. (EW)

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Permitted Permitted Protected Protected

Rights: Include Include Include Include

Min. Green: 17 17 17 20 20 20 10 20 20 10 17 17

Lanes: 0 1 0 0 1 0 1 0 0 1 0 1 0 0 1 0

-----|-----|-----|-----|

Volume Module:

Base Vol: 23 23 7 15 14 151 87 206 18 5 316 20

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 23 23 7 15 14 151 87 206 18 5 316 20

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.75 0.75 0.75 0.82 0.82 0.82 0.91 0.91 0.91 0.88 0.88 0.88

PHF Volume: 31 31 9 18 17 185 96 228 20 6 361 23

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 31 31 9 18 17 185 96 228 20 6 361 23

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 31 31 9 18 17 185 96 228 20 6 361 23

-----|-----|-----|-----|

Saturation Flow Module:

Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 0.50 0.50 1.00 0.52 0.48 1.00 1.00 0.92 0.08 1.00 0.94 0.06

Final Sat.: 900 900 1800 931 869 1800 1800 1655 145 1800 1693 107

-----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat: 0.03 0.03 0.01 0.02 0.02 0.10 0.05 0.14 0.14 0.00 0.21 0.21

Crit Moves: **** *

Green/Cycle: 0.33 0.33 0.33 0.33 0.33 0.33 0.21 0.40 0.40 0.17 0.36 0.36

Volume/Cap: 0.10 0.10 0.02 0.06 0.06 0.31 0.25 0.34 0.34 0.02 0.60 0.60

Delay/Veh: 13.9 13.9 13.4 13.6 13.6 15.2 20.1 12.8 12.8 20.9 17.3 17.3

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 13.9 13.9 13.4 13.6 13.6 15.2 20.1 12.8 12.8 20.9 17.3 17.3

LOS by Move: B B B B B B C B B C B B

HCM2kAvgQ: 1 1 0 0 0 3 2 3 3 0 7 7

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
Interim Year Without Project Weekend Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

```

*****
Intersection #101 Deep Creek Rd. (NS) / Bear Valley Rd. (EW)
*****
Average Delay (sec/veh):      345.0      Worst Case Level Of Service: F[8019.5]
*****
Street Name:      Deep Creek Rd. (NS)      Bear Valley Rd. (EW)
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:      L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:      Stop Sign      Stop Sign      Uncontrolled      Uncontrolled
Rights:      Include      Include      Include      Include
Lanes:      0 0 1! 0 0      0 0 0 0 0      0 0 2 0 1      1 0 2 0 0
-----|-----|-----|-----|
Volume Module:
Base Vol:      79      0      88      0      0      0      0 2090      105      96 1520      0
Growth Adj:      1.00 1.00      1.00      1.00 1.00      1.00      1.00 1.00      1.00 1.00 1.00
Initial Bse:      79      0      88      0      0      0      0 2090      105      96 1520      0
User Adj:      1.00 1.00      1.00      1.00 1.00      1.00      1.00 1.00      1.00 1.00 1.00
PHF Adj:      0.93 0.93      0.93      1.00 1.00      1.00      0.95 0.95      0.95 0.95 0.95
PHF Volume:      85      0      95      0      0      0      0 2205      111      101 1593      0
Reduct Vol:      0      0      0      0      0      0      0      0      0      0      0
FinalVolume:      85      0      95      0      0      0      0 2205      111      101 1593      0
-----|-----|-----|-----|
Critical Gap Module:
Critical Gp:      6.8      6.5      6.9      xxxxxx      xxxxx      xxxxxx      xxxxxx      xxxxx      xxxxxx      4.1      xxxxx      xxxxxx
FollowUpTim:      3.5      4.0      3.3      xxxxxx      xxxxx      xxxxxx      xxxxxx      xxxxx      xxxxxx      2.2      xxxxx      xxxxxx
-----|-----|-----|-----|
Capacity Module:
Cnflct Vol:      3203 3999      1102      xxxxx      xxxxx      xxxxxx      xxxxx      xxxxx      xxxxxx      2315      xxxxx      xxxxxx
Potent Cap.:      8      3      210      xxxxx      xxxxx      xxxxxx      xxxxx      xxxxx      xxxxxx      219      xxxxx      xxxxxx
Move Cap.:      5      2      210      xxxxx      xxxxx      xxxxxx      xxxxx      xxxxx      xxxxxx      219      xxxxx      xxxxxx
Volume/Cap:      16.81 0.00      0.45      xxxxx      xxxxx      xxxxx      xxxxx      xxxxx      xxxxx      0.46      xxxxx      xxxxx
-----|-----|-----|-----|
Level Of Service Module:
2Way95thQ:      xxxxx      xxxxx      xxxxxx      xxxxx      xxxxx      xxxxxx      xxxxx      xxxxx      xxxxxx      2.2      xxxxx      xxxxxx
Control Del:      xxxxxx      xxxxx      xxxxxx      xxxxxx      xxxxx      xxxxxx      xxxxxx      xxxxx      xxxxxx      34.7      xxxxx      xxxxxx
LOS by Move:      *      *      *      *      *      *      *      *      *      D      *      *
Movement:      LT - LTR - RT      LT - LTR - RT      LT - LTR - RT      LT - LTR - RT
Shared Cap.:      xxxxx      10      xxxxxx      xxxxx      xxxxx      xxxxxx      xxxxx      xxxxx      xxxxxx      xxxxx      xxxxx      xxxxxx
SharedQueue:      xxxxxx      24.0      xxxxxx      xxxxxx      xxxxx      xxxxxx      xxxxxx      xxxxx      xxxxxx      xxxxxx      xxxxx      xxxxxx
Shrd ConDel:      xxxxxx      8019      xxxxxx      xxxxxx      xxxxx      xxxxxx      xxxxxx      xxxxx      xxxxxx      xxxxxx      xxxxx      xxxxxx
Shared LOS:      *      F      *      *      *      *      *      *      *      *      *      *
ApproachDel:      8019.5      xxxxxx      xxxxxx      xxxxxx
ApproachLOS:      F      *      *      *
*****
Note: Queue reported is the number of cars per lane.
*****

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Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
Interim Year Without Project Weekend Conditions WIMP
PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #101 Deep Creek Rd. (NS) / Bear Valley Rd. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.878

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 26.4

Optimal Cycle: OPTIMIZED Level Of Service: C

Street Name: Deep Creek Rd. (NS) Bear Valley Rd. (EW)

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Permitted Permitted Protected Protected

Rights: Include Include Include Include

Min. Green: 26 0 26 0 0 0 0 14 10 14 0

Lanes: 0 0 1 0 0 0 0 2 0 1 0 0

-----|-----|-----|-----|

Volume Module:

Base Vol: 79 0 88 0 0 0 0 2090 105 96 1520 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 79 0 88 0 0 0 0 2090 105 96 1520 0

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 79 0 88 0 0 0 0 2090 105 96 1520 0

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.93 0.93 0.93 1.00 1.00 1.00 0.95 0.95 0.95 0.95 0.95 0.95

PHF Volume: 85 0 95 0 0 0 0 2205 111 101 1593 0

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 85 0 95 0 0 0 0 2205 111 101 1593 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.05 1.00 1.00 1.05 1.00

FinalVolume: 85 0 95 0 0 0 0 2315 111 101 1673 0

-----|-----|-----|-----|

Saturation Flow Module:

Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800

Adjustment: 0.75 1.00 0.80 0.94 1.00 1.00 0.94 1.00 0.85 0.90 1.00 1.00

Lanes: 0.49 0.00 0.51 0.00 0.00 0.00 0.00 2.00 1.00 1.00 2.00 0.00

Final Sat.: 660 0 735 0 0 0 0 3600 1530 1615 3600 0

-----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat: 0.13 0.00 0.13 0.00 0.00 0.00 0.00 0.64 0.07 0.06 0.46 0.00

Crit Moves: ****

Green/Cycle: 0.22 0.00 0.22 0.00 0.00 0.00 0.00 0.65 0.65 0.08 0.73 0.00

Volume/Cap: 0.60 0.00 0.60 0.00 0.00 0.00 0.00 0.99 0.11 0.75 0.63 0.00

Delay/Veh: 45.5 0.0 45.5 0.0 0.0 0.0 0.0 36.7 8.0 74.2 8.5 0.0

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 45.5 0.0 45.5 0.0 0.0 0.0 0.0 36.7 8.0 74.2 8.5 0.0

LOS by Move: D A D A A A A D A E A A

HCM2kAvgQ: 7 0 7 0 0 0 0 49 2 6 16 0

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
Interim Year Without Project Weekend Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #102 Deep Creek Road (NS) / Project Access [Outpost Rd.] (EW)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[11.9]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0

Volume Module:

Base Vol:	0	197	5	0	190	1	2	0	0	2	0	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	197	5	0	190	1	2	0	0	2	0	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.93	0.93	0.93	0.75	0.75	0.75	0.75	0.75	0.75
PHF Volume:	0	229	6	0	204	1	3	0	0	3	0	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	0	229	6	0	204	1	3	0	0	3	0	5

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.1	xxxx	xxxxxx	7.1	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxxx	3.5	4.0	3.3

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	439	xxxx	xxxxxx	436	437	231
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	532	xxxx	xxxxxx	534	516	813
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	528	xxxx	xxxxxx	534	516	813
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	0.00	0.00	0.01

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxxx	xxxx	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.9	xxxx	xxxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxxx	xxxx	692	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxxx	xxxx	xxxxxx	xxxxx	0.0	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxxx	xxxx	xxxxxx	xxxxx	10.3	xxxxx			
Shared LOS:	*	*	*	*	*	*	*	*	*	*	B	*			
ApproachDel:	xxxxxxx			xxxxxxx			11.9				10.3				
ApproachLOS:	*			*			B				B				

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
Interim Year Without Project Weekend Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #103 Deep Creek Rd. (NS) / Rock Springs Rd. (EW)

Cycle (sec): 65 Critical Vol./Cap.(X): 0.453

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 17.3

Optimal Cycle: OPTIMIZED Level Of Service: B

Street Name: Deep Creek Rd. (NS) Rock Springs Rd. (EW)

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Permitted Permitted Protected Protected

Rights: Include Include Include Include

Min. Green: 17 17 17 20 20 20 10 20 10 17 17

Lanes: 0 1 0 0 1 0 1 0 0 1 0

-----|-----|-----|-----|

Volume Module:

Base Vol: 34 20 12 27 21 154 158 457 36 18 292 25

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 34 20 12 27 21 154 158 457 36 18 292 25

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 34 20 12 27 21 154 158 457 36 18 292 25

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.75 0.75 0.75 0.80 0.80 0.80 0.94 0.94 0.94 0.92 0.92 0.92

PHF Volume: 45 27 16 34 26 194 169 488 38 20 318 27

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 45 27 16 34 26 194 169 488 38 20 318 27

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 45 27 16 34 26 194 169 488 38 20 318 27

-----|-----|-----|-----|

Saturation Flow Module:

Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800

Adjustment: 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00

Lanes: 0.64 0.36 1.00 0.58 0.42 1.00 1.00 0.93 0.07 1.00 0.92 0.08

Final Sat.: 1093 643 1800 980 762 1800 1700 1669 131 1700 1658 142

-----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat: 0.04 0.04 0.01 0.03 0.03 0.11 0.10 0.29 0.29 0.01 0.19 0.19

Crit Moves: ****

Green/Cycle: 0.31 0.31 0.31 0.31 0.31 0.31 0.22 0.45 0.45 0.15 0.38 0.38

Volume/Cap: 0.13 0.13 0.03 0.11 0.11 0.35 0.45 0.66 0.66 0.07 0.51 0.51

Delay/Veh: 16.4 16.4 15.7 16.2 16.2 17.8 22.7 16.1 16.1 23.7 16.2 16.2

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 16.4 16.4 15.7 16.2 16.2 17.8 22.7 16.1 16.1 23.7 16.2 16.2

LOS by Move: B B B B B C B B C B B

HCM2kAvgQ: 1 1 0 1 1 3 4 9 9 0 6 6

Note: Queue reported is the number of cars per lane.

APPENDIX I

2014 INTERIM YEAR WITH PROJECT CONDITIONS
INTERSECTION ANALYSIS
(WITHOUT AND WITH IMPROVEMENTS)

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
Interim Year With Project Weekend Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #101 Deep Creek Rd. (NS) / Bear Valley Rd. (EW)

Average Delay (sec/veh): 119.7 Worst Case Level Of Service: F[2109.3]

Street Name:	Deep Creek Rd. (NS)						Bear Valley Rd. (EW)									
Approach:	North Bound			South Bound			East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled						
Rights:	Include			Include			Include			Include						
Lanes:	0	0	1	0	0	0	0	0	2	0	1	1	0	2	0	0

Volume Module:	Deep Creek Rd. (NS)						Bear Valley Rd. (EW)					
Base Vol:	98	0	65	0	0	0	0	1074	70	55	1792	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	98	0	65	0	0	0	0	1074	70	55	1792	0
Added Vol:	0	0	0	0	0	0	0	0	45	45	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	98	0	65	0	0	0	0	1074	115	100	1792	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.80	0.80	0.80	1.00	1.00	1.00	0.94	0.94	0.94	0.88	0.88	0.88
PHF Volume:	123	0	82	0	0	0	0	1146	123	114	2036	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	123	0	82	0	0	0	0	1146	123	114	2036	0

Critical Gap Module:	Deep Creek Rd. (NS)						Bear Valley Rd. (EW)					
Critical Gp:	6.8	6.5	6.9	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	4.1	xxxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	2.2	xxxxx	xxxxx

Capacity Module:	Deep Creek Rd. (NS)						Bear Valley Rd. (EW)					
Cnflct Vol:	2392	3410	573	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	1269	xxxxx	xxxxx
Potent Cap.:	29	7	468	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	554	xxxxx	xxxxx
Move Cap.:	24	6	468	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	554	xxxxx	xxxxx
Volume/Cap:	5.06	0.00	0.17	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.20	xxxxx	xxxxx

Level Of Service Module:	Deep Creek Rd. (NS)						Bear Valley Rd. (EW)					
2Way95thQ:	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.8	xxxxx	xxxxx
Control Del:	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	13.2	xxxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	B	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxxx	39	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
SharedQueue:	xxxxx	23.9	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Shrd ConDel:	xxxxx	2109	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Shared LOS:	*	F	*	*	*	*	*	*	*	*	*	*
ApproachDel:	2109.3		xxxxxxx			xxxxxxx			xxxxxxx			
ApproachLOS:	F		*			*			*			*

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
Interim Year With Project Weekend Conditions WIMP
AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #101 Deep Creek Rd. (NS) / Bear Valley Rd. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.787
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 16.7
Optimal Cycle: OPTIMIZED Level Of Service: B

Street Name:	Deep Creek Rd. (NS)						Bear Valley Rd. (EW)					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	26	0	26	0	0	0	0	14	14	10	14	0
Lanes:	0	0	1	0	0	0	0	0	2	0	1	1

Volume Module:	Deep Creek Rd. (NS)			Deep Creek Rd. (NS)			Bear Valley Rd. (EW)			Bear Valley Rd. (EW)		
Base Vol:	98	0	65	0	0	0	0	1074	70	55	1792	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	98	0	65	0	0	0	0	1074	70	55	1792	0
Added Vol:	0	0	0	0	0	0	0	0	45	45	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	98	0	65	0	0	0	0	1074	115	100	1792	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.80	0.80	0.80	1.00	1.00	1.00	0.94	0.94	0.94	0.88	0.88	0.88
PHF Volume:	123	0	82	0	0	0	0	1146	123	114	2036	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	0	82	0	0	0	0	1146	123	114	2036	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.05	1.00	1.00	1.05	1.00
FinalVolume:	123	0	82	0	0	0	0	1204	123	114	2138	0

Saturation Flow Module:	Deep Creek Rd. (NS)			Deep Creek Rd. (NS)			Bear Valley Rd. (EW)			Bear Valley Rd. (EW)		
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.73	1.00	0.77	0.94	1.00	1.00	0.94	1.00	0.85	0.90	1.00	1.00
Lanes:	0.61	0.00	0.39	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	804	0	533	0	0	0	0	3600	1530	1615	3600	0

Capacity Analysis Module:	Deep Creek Rd. (NS)			Deep Creek Rd. (NS)			Bear Valley Rd. (EW)			Bear Valley Rd. (EW)		
Vol/Sat:	0.15	0.00	0.15	0.00	0.00	0.00	0.00	0.33	0.08	0.07	0.59	0.00
Crit Moves:	****						****			****		
Green/Cycle:	0.22	0.00	0.22	0.00	0.00	0.00	0.00	0.59	0.59	0.15	0.73	0.00
Volume/Cap:	0.71	0.00	0.71	0.00	0.00	0.00	0.00	0.57	0.14	0.48	0.81	0.00
Delay/Veh:	51.3	0.0	51.3	0.0	0.0	0.0	0.0	15.7	11.2	48.6	12.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.3	0.0	51.3	0.0	0.0	0.0	0.0	15.7	11.2	48.6	12.5	0.0
LOS by Move:	D	A	D	A	A	A	A	B	B	D	B	A
HCM2kAvgQ:	9	0	9	0	0	0	0	14	2	5	27	0

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
Interim Year With Project Weekend Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #102 Deep Creek Road (NS) / Project Access [Outpost Rd.] (EW)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: C[15.3]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	L	T	R					
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0

Volume Module:

Base Vol:	0	126	5	10	183	1	5	2	0	1	7	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	126	5	10	183	1	5	2	0	1	7	0
Added Vol:	0	0	60	90	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	126	65	100	183	1	5	2	0	1	7	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.85	0.85	0.85	0.75	0.75	0.75	0.75	0.75	0.75
PHF Volume:	0	135	70	118	216	1	7	3	0	1	9	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	135	70	118	216	1	7	3	0	1	9	0

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	xxxxx	7.1	6.5	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	xxxxx	3.5	4.0	xxxxx

Capacity Module:

Cnflict Vol:	xxxx	xxxx	xxxxx	204	xxxx	xxxxx	627	657	xxxxx	624	623	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	1379	xxxx	xxxxx	399	387	xxxxx	401	405	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	1379	xxxx	xxxxx	364	352	xxxxx	371	368	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.09	xxxx	xxxx	0.02	0.01	xxxx	0.00	0.03	xxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	360	xxxx	xxxxx	368	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	15.3	xxxx	xxxxx	15.1	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	C	*	*	C	*	*
ApproachDel:	xxxxxx			xxxxxx			15.3			15.1		
ApproachLOS:	*			*			C			C		

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
Interim Year With Project Weekend Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #103 Deep Creek Rd. (NS) / Rock Springs Rd. (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.271

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 16.3

Optimal Cycle: OPTIMIZED Level Of Service: B

Street Name: Deep Creek Rd. (NS) Rock Springs Rd. (EW)

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

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Control: Permitted Permitted Protected Protected

Rights: Include Include Include Include

Min. Green: 17 17 17 20 20 20 10 20 20 10 17 17

Lanes: 0 1 0 0 1 0 1 0 0 1 0 1 0

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Volume Module:

Base Vol: 23 23 7 15 14 151 87 206 18 5 316 20

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 23 23 7 15 14 151 87 206 18 5 316 20

Added Vol: 0 0 0 0 0 0 45 0 0 0 0 15

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 23 23 7 15 14 151 132 206 18 5 316 35

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.75 0.75 0.75 0.82 0.82 0.82 0.91 0.91 0.91 0.88 0.88 0.88

PHF Volume: 31 31 9 18 17 185 146 228 20 6 361 40

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 31 31 9 18 17 185 146 228 20 6 361 40

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 31 31 9 18 17 185 146 228 20 6 361 40

-----|-----|-----|-----|

Saturation Flow Module:

Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800

Adjustment: 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00

Lanes: 0.51 0.49 1.00 0.53 0.47 1.00 1.00 0.92 0.08 1.00 0.90 0.10

Final Sat.: 874 874 1800 904 843 1800 1700 1655 145 1700 1621 179

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Capacity Analysis Module:

Vol/Sat: 0.04 0.04 0.01 0.02 0.02 0.10 0.09 0.14 0.14 0.00 0.22 0.22

Crit Moves: ****

Green/Cycle: 0.33 0.33 0.33 0.33 0.33 0.33 0.21 0.40 0.40 0.17 0.36 0.36

Volume/Cap: 0.11 0.11 0.02 0.06 0.06 0.31 0.41 0.34 0.34 0.02 0.62 0.62

Delay/Veh: 13.9 13.9 13.4 13.7 13.7 15.2 21.3 12.8 12.8 20.9 17.9 17.9

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 13.9 13.9 13.4 13.7 13.7 15.2 21.3 12.8 12.8 20.9 17.9 17.9

LOS by Move: B B B B B C B B C B B

HCM2kAvgQ: 1 1 0 0 0 3 3 3 3 0 7 7

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
Interim Year With Project Weekend Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #101 Deep Creek Rd. (NS) / Bear Valley Rd. (EW)

Average Delay (sec/veh): 598.8 Worst Case Level Of Service: F[10675.4]

Street Name:	Deep Creek Rd. (NS)						Bear Valley Rd. (EW)					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0 0	0	0	0 0 0	0	0	2 0 1	1	0	2 0 0

Volume Module:	Deep Creek Rd. (NS)			Deep Creek Rd. (NS)			Bear Valley Rd. (EW)			Bear Valley Rd. (EW)		
Base Vol:	79	0	88	0	0	0	0	2090	105	96	1520	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	0	88	0	0	0	0	2090	105	96	1520	0
Added Vol:	27	0	27	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	106	0	115	0	0	0	0	2090	105	96	1520	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	114	0	124	0	0	0	0	2205	111	101	1593	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	114	0	124	0	0	0	0	2205	111	101	1593	0

Critical Gap Module:	Deep Creek Rd. (NS)			Deep Creek Rd. (NS)			Bear Valley Rd. (EW)			Bear Valley Rd. (EW)		
Critical Gp:	6.8	6.5	6.9	xxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	4.1	xxxx	xxxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	2.2	xxxx	xxxxxx

Capacity Module:	Deep Creek Rd. (NS)			Deep Creek Rd. (NS)			Bear Valley Rd. (EW)			Bear Valley Rd. (EW)		
Cnflct Vol:	3203	3999	1102	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	2315	xxxx	xxxxxx
Potent Cap.:	8	3	210	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	219	xxxx	xxxxxx
Move Cap.:	5	2	210	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	219	xxxx	xxxxxx
Volume/Cap:	22.56	0.00	0.59	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.46	xxxx	xxxx

Level Of Service Module:	Deep Creek Rd. (NS)			Deep Creek Rd. (NS)			Bear Valley Rd. (EW)			Bear Valley Rd. (EW)		
2Way95thQ:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	2.2	xxxx	xxxxxx
Control Del:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	34.7	xxxx	xxxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	D	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	10	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	31.3	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	F	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	F			*			*			*		

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
Interim Year With Project Weekend Conditions WIMP
PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

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*****
Intersection #101 Deep Creek Rd. (NS) / Bear Valley Rd. (EW)
*****
Cycle (sec):          120          Critical Vol./Cap.(X):          0.924
Loss Time (sec):      6 (Y+R=4.0 sec)  Average Delay (sec/veh):      27.3
Optimal Cycle: OPTIMIZED          Level Of Service:          C
*****
Street Name:          Deep Creek Rd. (NS)          Bear Valley Rd. (EW)
Approach:             North Bound          South Bound          East Bound          West Bound
Movement:             L - T - R          L - T - R          L - T - R          L - T - R
-----|-----|-----|-----|
Control:              Permitted          Permitted          Protected          Protected
Rights:               Include          Include          Include          Include
Min. Green:           26  0  26          0  0  0          0  14  14          10  14  0
Lanes:                0  0  1!  0  0          0  0  0  0  0          0  0  2  0  1          1  0  2  0  0
-----|-----|-----|-----|
Volume Module:
Base Vol:             79  0  88          0  0  0          0  2090  105          96  1520  0
Growth Adj:           1.00  1.00  1.00          1.00  1.00  1.00          1.00  1.00  1.00          1.00  1.00  1.00
Initial Bse:           79  0  88          0  0  0          0  2090  105          96  1520  0
Added Vol:             27  0  27          0  0  0          0  0  0          0  0  0  0
PasserByVol:           0  0  0          0  0  0          0  0  0          0  0  0  0
Initial Fut:           106  0  115          0  0  0          0  2090  105          96  1520  0
User Adj:              1.00  1.00  1.00          1.00  1.00  1.00          1.00  1.00  1.00          1.00  1.00  1.00
PHF Adj:               0.93  0.93  0.93          1.00  1.00  1.00          0.95  0.95  0.95          0.95  0.95  0.95
PHF Volume:            114  0  124          0  0  0          0  2205  111          101  1593  0
Reduct Vol:            0  0  0          0  0  0          0  0  0          0  0  0  0
Reduced Vol:           114  0  124          0  0  0          0  2205  111          101  1593  0
PCE Adj:               1.00  1.00  1.00          1.00  1.00  1.00          1.00  1.00  1.00          1.00  1.00  1.00
MLF Adj:               1.00  1.00  1.00          1.00  1.00  1.00          1.00  1.05  1.00          1.00  1.05  1.00
FinalVolume:           114  0  124          0  0  0          0  2315  111          101  1673  0
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:              1800  1800  1800          1800  1800  1800          1800  1800  1800          1800  1800  1800
Adjustment:            0.74  1.00  0.79          0.94  1.00  1.00          0.94  1.00  0.85          0.90  1.00  1.00
Lanes:                 0.49  0.00  0.51          0.00  0.00  0.00          0.00  2.00  1.00          1.00  2.00  0.00
Final Sat.:            661  0  718          0  0  0          0  3600  1530          1615  3600  0
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:               0.17  0.00  0.17          0.00  0.00  0.00          0.00  0.64  0.07          0.06  0.46  0.00
Crit Moves:           ****          ****          ****          ****
Green/Cycle:           0.22  0.00  0.22          0.00  0.00  0.00          0.00  0.65  0.65          0.08  0.73  0.00
Volume/Cap:            0.80  0.00  0.80          0.00  0.00  0.00          0.00  0.99  0.11          0.75  0.63  0.00
Delay/Veh:             58.3  0.0  58.3          0.0  0.0  0.0          0.0  36.7  8.0          74.2  8.5  0.0
User DelAdj:           1.00  1.00  1.00          1.00  1.00  1.00          1.00  1.00  1.00          1.00  1.00  1.00
AdjDel/Veh:           58.3  0.0  58.3          0.0  0.0  0.0          0.0  36.7  8.0          74.2  8.5  0.0
LOS by Move:           E  A  E          A  A  A          A  D  A          E  A  A
HCM2kAvgQ:             11  0  11          0  0  0          0  49  2          6  16  0
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Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
Interim Year With Project Weekend Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #102 Deep Creek Road (NS) / Project Access [Outpost Rd.] (EW)

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: B[13.0]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	L	T	R					
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0

Volume Module:

Base Vol:	0	197	5	0	190	1	2	0	0	2	0	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	197	5	0	190	1	2	0	0	2	0	4
Added Vol:	0	0	0	0	0	0	0	0	0	36	0	54
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	197	5	0	190	1	2	0	0	38	0	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.93	0.93	0.93	0.75	0.75	0.75	0.75	0.75	0.75
PHF Volume:	0	229	6	0	204	1	3	0	0	51	0	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	229	6	0	204	1	3	0	0	51	0	77

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.1	xxxx	xxxxx	7.1	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	3.5	4.0	3.3

Capacity Module:

Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	475	xxxx	xxxxx	436	437	231
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	503	xxxx	xxxxx	534	516	813
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	455	xxxx	xxxxx	534	516	813
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	0.09	0.00	0.10

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	13.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	673	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.7	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.6	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			13.0			11.6		
ApproachLOS:	*			*			B			B		

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
Interim Year With Project Weekend Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #103 Deep Creek Rd. (NS) / Rock Springs Rd. (EW)

Cycle (sec): 65 Critical Vol./Cap.(X): 0.474

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 17.3

Optimal Cycle: OPTIMIZED Level Of Service: B

Street Name: Deep Creek Rd. (NS) Rock Springs Rd. (EW)

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|-----|

Control: Permitted Permitted Protected Protected

Rights: Include Include Include Include

Min. Green: 17 17 17 20 20 20 10 20 20 10 17 17

Lanes: 0 1 0 0 1 0 1 0 0 1 0 1 0

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Volume Module:

Base Vol: 34 20 12 27 21 154 158 457 36 18 292 25

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 34 20 12 27 21 154 158 457 36 18 292 25

Added Vol: 0 0 0 9 0 27 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 34 20 12 36 21 181 158 457 36 18 292 25

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.75 0.75 0.75 0.80 0.80 0.80 0.94 0.94 0.94 0.92 0.92 0.92

PHF Volume: 45 27 16 45 26 228 169 488 38 20 318 27

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 45 27 16 45 26 228 169 488 38 20 318 27

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 45 27 16 45 26 228 169 488 38 20 318 27

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Saturation Flow Module:

Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800

Adjustment: 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00

Lanes: 0.64 0.36 1.00 0.64 0.36 1.00 1.00 0.93 0.07 1.00 0.92 0.08

Final Sat.: 1093 643 1800 1096 639 1800 1700 1669 131 1700 1658 142

-----|-----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat: 0.04 0.04 0.01 0.04 0.04 0.13 0.10 0.29 0.29 0.01 0.19 0.19

Crit Moves: ****

Green/Cycle: 0.31 0.31 0.31 0.31 0.31 0.31 0.22 0.45 0.45 0.15 0.38 0.38

Volume/Cap: 0.13 0.13 0.03 0.13 0.13 0.41 0.45 0.66 0.66 0.07 0.51 0.51

Delay/Veh: 16.4 16.4 15.7 16.4 16.4 18.3 22.7 16.1 16.1 23.7 16.2 16.2

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 16.4 16.4 15.7 16.4 16.4 18.3 22.7 16.1 16.1 23.7 16.2 16.2

LOS by Move: B B B B B B C B B C B B

HCM2kAvgQ: 1 1 0 1 1 4 4 9 9 0 6 6

Note: Queue reported is the number of cars per lane.

APPENDIX J

2030 WITHOUT PROJECT CONDITIONS
INTERSECTION ANALYSIS
(WITHOUT AND WITH IMPROVEMENTS)

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
2030 Without Project Weekend Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #101 Deep Creek Rd. (NS) / Bear Valley Rd. (EW)

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Street Name: Deep Creek Rd. (NS) Bear Valley Rd. (EW)

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled

Rights: Include Include Include Include

Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 2 0 1 1 0 1 1 0

-----|-----|-----|-----|

Volume Module:

Base Vol: 94 35 88 24 14 26 57 1282 80 63 1088 45

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 94 35 88 24 14 26 57 1282 80 63 1088 45

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95

PHF Volume: 99 37 93 25 15 27 60 1349 84 66 1145 47

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

FinalVolume: 99 37 93 25 15 27 60 1349 84 66 1145 47

-----|-----|-----|-----|

Critical Gap Module:

Critical Gp: 7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxxx 4.1 xxxx xxxxxx

FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxxx 2.2 xxxx xxxxxx

-----|-----|-----|-----|

Capacity Module:

Cnflct Vol: 2182 2795 675 2115 2855 596 1193 xxxx xxxxxx 1434 xxxx xxxxxx

Potent Cap.: 26 19 401 30 17 452 592 xxxx xxxxxx 480 xxxx xxxxxx

Move Cap.: 0 15 401 0 13 452 592 xxxx xxxxxx 480 xxxx xxxxxx

Volume/Cap: xxxx 2.53 0.23 xxxx 1.11 0.06 0.10 xxxx xxxx 0.14 xxxx xxxx

-----|-----|-----|-----|

Level Of Service Module:

2Way95thQ: xxxx xxxx xxxxxx xxxx xxxx xxxxxx 0.3 xxxx xxxxxx 0.5 xxxx xxxxxx

Control Del:xxxxx xxxx xxxxxx xxxxxx xxxx xxxxxx 11.8 xxxx xxxxxx 13.7 xxxx xxxxxx

LOS by Move: * * * * * B * * B * *

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxx 0 xxxxxx xxxx 0 xxxxxx xxxx xxxx xxxxxx xxxx xxxx xxxxxx

SharedQueue:xxxxx xxxx xxxxxx xxxxxx xxxx xxxxxx xxxxxx xxxx xxxxxx xxxxxx xxxx xxxxxx

Shrd ConDel:xxxxx xxxx xxxxxx xxxxxx xxxx xxxxxx xxxxxx xxxx xxxxxx xxxxxx xxxx xxxxxx

Shared LOS: * * * * * * * * * * * * *

ApproachDel: xxxxxx xxxxxx xxxxxx xxxxxx

ApproachLOS: F F * *

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
 2030 Without Project Weekend Conditions WIMP
 AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #101 Deep Creek Rd. (NS) / Bear Valley Rd. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.522

Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 19.5

Optimal Cycle: OPTIMIZED Level Of Service: B

Street Name: Deep Creek Rd. (NS) Bear Valley Rd. (EW)

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Protected Protected Protected Protected

Rights: Include Include Include Include

Min. Green: 10 20 20 10 23 23 10 14 14 10 14 14

Lanes: 1 0 0 1 0 1 0 0 1 0 1 0 1 1 0

-----|-----|-----|-----|

Volume Module:

Base Vol: 94 35 88 24 14 26 57 1282 80 63 1088 45

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 94 35 88 24 14 26 57 1282 80 63 1088 45

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95

PHF Volume: 99 37 93 25 15 27 60 1349 84 66 1145 47

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 99 37 93 25 15 27 60 1349 84 66 1145 47

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.05 1.00 1.00 1.05 1.05

Final Volume: 99 37 93 25 15 27 60 1417 84 66 1203 50

-----|-----|-----|-----|

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00

Lanes: 1.00 0.28 0.72 1.00 0.35 0.65 1.00 2.00 1.00 1.00 1.92 0.08

Final Sat.: 1800 541 1359 1800 665 1235 1800 3800 1900 1800 3649 151

-----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat: 0.05 0.07 0.07 0.01 0.02 0.02 0.03 0.37 0.04 0.04 0.33 0.33

Crit Moves: **** **** **** ****

Green/Cycle: 0.08 0.18 0.18 0.09 0.19 0.19 0.13 0.57 0.57 0.08 0.52 0.52

Volume/Cap: 0.65 0.37 0.37 0.15 0.12 0.12 0.25 0.65 0.08 0.44 0.63 0.63

Delay/Veh: 72.7 45.8 45.8 52.1 40.7 40.7 49.2 12.5 7.4 61.5 16.2 16.2

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 72.7 45.8 45.8 52.1 40.7 40.7 49.2 12.5 7.4 61.5 16.2 16.2

LOS by Move: E D D D D D D B A E B B

HCM2kAvgQ: 5 4 4 1 1 1 2 13 1 3 13 13

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
2030 Without Project Weekend Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

```

*****
Intersection #102 Deep Creek Road (NS) / Project Access [Outpost Rd.] (EW)
*****
Average Delay (sec/veh):      0.7      Worst Case Level Of Service: B[ 12.1]
*****
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:      L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:      Uncontrolled      Uncontrolled      Stop Sign      Stop Sign
Rights:      Include      Include      Include      Include
Lanes:      0 0 0 1 0      0 0 1! 0 0      0 1 0 0 0      0 1 0 0 0
-----|-----|-----|-----|
Volume Module:
Base Vol:      0 179      6 11 201      1 6 2 0      1 8 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 179      6 11 201      1 6 2 0      1 8 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
PHF Volume: 0 188      6 12 212      1 6 2 0      1 8 0
Reduct Vol: 0 0      0 0 0      0 0 0      0 0 0
FinalVolume: 0 188      6 12 212      1 6 2 0      1 8 0
-----|-----|-----|-----|
Critical Gap Module:
Critical Gp:xxxxx xxxxx xxxxx      4.1 xxxxx xxxxxx      7.1 6.5 xxxxxx      7.1 6.5 xxxxxx
FollowUpTim:xxxxxx xxxxx xxxxxx      2.2 xxxxx xxxxxx      3.5 4.0 xxxxxx      3.5 4.0 xxxxxx
-----|-----|-----|-----|
Capacity Module:
Cnflct Vol: xxxxx xxxxx xxxxxx      195 xxxxx xxxxxx      431 430 xxxxxx      428 427 xxxxxx
Potent Cap.: xxxxx xxxxx xxxxxx      1390 xxxxx xxxxxx      538 521 xxxxxx      541 523 xxxxxx
Move Cap.: xxxxx xxxxx xxxxxx      1390 xxxxx xxxxxx      528 516 xxxxxx      536 518 xxxxxx
Volume/Cap: xxxxx xxxxx xxxxx      0.01 xxxxx xxxxx      0.01 0.00 xxxxx      0.00 0.02 xxxxx
-----|-----|-----|-----|
Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxxx      0.0 xxxxx xxxxxx      xxxxx xxxxx xxxxxx      xxxxx xxxxx xxxxxx
Control Del:xxxxxx xxxxx xxxxxx      7.6 xxxxx xxxxxx      xxxxxx xxxxx xxxxxx      xxxxxx xxxxx xxxxxx
LOS by Move: * * *      A * *      * * *      * * *
Movement: LT - LTR - RT      LT - LTR - RT      LT - LTR - RT      LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxxx      xxxxx xxxxx xxxxxx      525 xxxxx xxxxxx      520 xxxxx xxxxxx
SharedQueue:xxxxxx xxxxx xxxxxx      xxxxxx xxxxx xxxxxx      0.0 xxxxx xxxxxx      0.1 xxxxx xxxxxx
Shrd ConDel:xxxxxx xxxxx xxxxxx      xxxxxx xxxxx xxxxxx      12.0 xxxxx xxxxxx      12.1 xxxxx xxxxxx
Shared LOS: * * *      * * *      B * *      B * *
ApproachDel: xxxxxxx      xxxxxxx      12.0      12.1
ApproachLOS: *      *      B      B
*****
Note: Queue reported is the number of cars per lane.
*****

```

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
2030 Without Project Weekend Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #103 Deep Creek Rd. (NS) / Rock Springs Rd. (EW)

Cycle (sec): 71 Critical Vol./Cap.(X): 0.534

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 18.0

Optimal Cycle: OPTIMIZED Level Of Service: B

Street Name: Deep Creek Rd. (NS) Rock Springs Rd. (EW)

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Permitted Permitted Protected Protected

Rights: Include Include Include Include

Min. Green: 17 17 17 20 20 20 10 20 20 10 17 17

Lanes: 0 1 0 0 1 0 1 0 0 1 0 1 0 0

-----|-----|-----|-----|

Volume Module:

Base Vol: 25 25 8 17 15 166 140 348 18 6 540 28

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 25 25 8 17 15 166 140 348 18 6 540 28

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95

PHF Volume: 26 26 8 18 16 175 147 366 19 6 568 29

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 26 26 8 18 16 175 147 366 19 6 568 29

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 26 26 8 18 16 175 147 366 19 6 568 29

-----|-----|-----|-----|

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00

Lanes: 0.51 0.49 1.00 0.54 0.46 1.00 1.00 0.95 0.05 1.00 0.95 0.05

Final Sat.: 924 924 1900 980 865 1900 1800 1807 93 1800 1806 94

-----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat: 0.03 0.03 0.00 0.02 0.02 0.09 0.08 0.20 0.20 0.00 0.31 0.31

Crit Moves: **** *

Green/Cycle: 0.28 0.28 0.28 0.28 0.28 0.28 0.14 0.42 0.42 0.21 0.49 0.49

Volume/Cap: 0.10 0.10 0.02 0.06 0.06 0.33 0.58 0.48 0.48 0.02 0.64 0.64

Delay/Veh: 19.2 19.2 18.4 18.9 18.9 21.8 37.9 15.0 15.0 22.2 13.7 13.7

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 19.2 19.2 18.4 18.9 18.9 21.8 37.9 15.0 15.0 22.2 13.7 13.7

LOS by Move: B B B B B C D B B C B B

HCM2kAvgQ: 1 1 0 1 1 3 4 5 5 0 9 9

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
2030 Without Project Weekend Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

```

*****
Intersection #101 Deep Creek Rd. (NS) / Bear Valley Rd. (EW)
*****
Average Delay (sec/veh): OVERFLOW      Worst Case Level Of Service: F[xxxxxx]
*****
Street Name:      Deep Creek Rd. (NS)      Bear Valley Rd. (EW)
Approach:          North Bound      South Bound      East Bound      West Bound
Movement:          L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:           Stop Sign      Stop Sign      Uncontrolled      Uncontrolled
Rights:            Include      Include      Include      Include
Lanes:             0 0 1! 0 0      0 0 1! 0 0      1 0 2 0 1      1 0 1 1 0
-----|-----|-----|-----|
Volume Module:
Base Vol:          146 104 162 107 111 96 92 1302 150 139 1076 85
Growth Adj:        1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:        146 104 162 107 111 96 92 1302 150 139 1076 85
User Adj:           1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:            0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
PHF Volume:         154 109 171 113 117 101 97 1371 158 146 1133 89
Reduct Vol:          0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume:        154 109 171 113 117 101 97 1371 158 146 1133 89
-----|-----|-----|-----|
Critical Gap Module:
Critical Gp:        7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxxx 4.1 xxxx xxxxxx
FollowUpTim:         3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxxx 2.2 xxxx xxxxxx
-----|-----|-----|-----|
Capacity Module:
Cnflct Vol:         2482 3079 685 2404 3192 611 1222 xxxx xxxxxx 1528 xxxx xxxxxx
Potent Cap.:         15 12 395 18 10 442 577 xxxx xxxxxx 442 xxxx xxxxxx
Move Cap.:           0 7 395 0 6 442 577 xxxx xxxxxx 442 xxxx xxxxxx
Volume/Cap:         xxxx16.04 0.43 xxxx20.34 0.23 0.17 xxxx xxxx 0.33 xxxx xxxx
-----|-----|-----|-----|
Level Of Service Module:
2Way95thQ:          xxxx xxxx xxxxxx xxxx xxxx xxxxxx 0.6 xxxx xxxxxx 1.4 xxxx xxxxxx
Control Del:xxxxxx xxxx xxxxxx xxxxxx xxxx xxxxxx 12.5 xxxx xxxxxx 17.1 xxxx xxxxxx
LOS by Move:        * * * * * * B * * C * *
Movement:           LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.:        xxxx 0 xxxxxx xxxx 0 xxxxxx xxxx xxxx xxxxxx xxxx xxxx xxxxxx
SharedQueue:xxxxxx xxxx xxxxxx xxxxxx xxxx xxxxxx xxxxxx xxxx xxxxxx xxxxxx xxxx xxxxxx
Shrd ConDel:xxxxxx xxxx xxxxxx xxxxxx xxxx xxxxxx xxxxxx xxxx xxxxxx xxxxxx xxxx xxxxxx
Shared LOS:          * * * * * * * * * * * * * * *
ApproachDel:        xxxxxx xxxxxx xxxxxx xxxxxx
ApproachLOS:         F F * *
*****
Note: Queue reported is the number of cars per lane.
*****

```

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
 2030 Without Project Weekend Conditions WIMP
 PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #101 Deep Creek Rd. (NS) / Bear Valley Rd. (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.717

Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 29.0

Optimal Cycle: OPTIMIZED Level Of Service: C

Street Name: Deep Creek Rd. (NS) Bear Valley Rd. (EW)

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Protected Protected Protected Protected

Rights: Include Include Include Include

Min. Green: 10 20 20 10 23 23 10 14 14 10 14 14

Lanes: 1 0 0 1 0 1 0 0 1 0 1 0 1 1 0

-----|-----|-----|-----|

Volume Module:

Base Vol: 146 104 162 107 111 96 92 1302 150 139 1076 85

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 146 104 162 107 111 96 92 1302 150 139 1076 85

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95

PHF Volume: 154 109 171 113 117 101 97 1371 158 146 1133 89

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 154 109 171 113 117 101 97 1371 158 146 1133 89

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.05 1.00 1.00 1.05 1.05

FinalVolume: 154 109 171 113 117 101 97 1439 158 146 1189 94

-----|-----|-----|-----|

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00

Lanes: 1.00 0.39 0.61 1.00 0.54 0.46 1.00 2.00 1.00 1.00 1.85 0.15

Final Sat.: 1800 743 1157 1800 1019 881 1800 3800 1900 1800 3522 278

-----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat: 0.09 0.15 0.15 0.06 0.11 0.11 0.05 0.38 0.08 0.08 0.34 0.34

Crit Moves: **** **** **** ****

Green/Cycle: 0.11 0.23 0.23 0.11 0.23 0.23 0.13 0.48 0.48 0.10 0.45 0.45

Volume/Cap: 0.79 0.65 0.65 0.56 0.50 0.50 0.40 0.79 0.17 0.79 0.75 0.75

Delay/Veh: 70.6 42.8 42.8 52.5 37.5 37.5 44.7 21.0 12.2 72.0 22.3 22.3

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 70.6 42.8 42.8 52.5 37.5 37.5 44.7 21.0 12.2 72.0 22.3 22.3

LOS by Move: E D D D D D D C B E C C

HCM2kAvgQ: 7 9 9 4 6 6 3 18 2 7 16 16

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
2030 Without Project Weekend Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #102 Deep Creek Road (NS) / Project Access [Outpost Rd.] (EW)

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[16.1]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0

Volume Module:

Base Vol:	0	375	6	0	333	1	2	0	0	2	0	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	375	6	0	333	1	2	0	0	2	0	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	395	6	0	351	1	2	0	0	2	0	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	0	395	6	0	351	1	2	0	0	2	0	4

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.1	xxxx	xxxxx	7.1	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	3.5	4.0	3.3

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	751	xxxx	xxxxx	749	749	398
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	330	xxxx	xxxxx	331	343	656
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	327	xxxx	xxxxx	331	343	656
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	0.01	0.00	0.01

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	16.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*	*	*	*	C	*	*	*	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	494	xxxxx			
Shared Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.4	xxxxx			
Shared LOS:	*	*	*	*	*	*	*	*	*	*	B	*			
ApproachDel:	xxxxxxx			xxxxxxx			16.1				12.4				
ApproachLOS:	*			*			C				B				

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
 2030 Without Project Weekend Conditions
 PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #103 Deep Creek Rd. (NS) / Rock Springs Rd. (EW)

Cycle (sec): 101 Critical Vol./Cap.(X): 0.767

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 26.6

Optimal Cycle: OPTIMIZED Level Of Service: C

Street Name: Deep Creek Rd. (NS) Rock Springs Rd. (EW)

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Permitted Permitted Protected Protected

Rights: Include Include Include Include

Min. Green: 17 17 17 20 20 20 10 20 20 10 17 17

Lanes: 0 1 0 0 1 0 1 0 0 1 0 1 0 0

-----|-----|-----|-----|

Volume Module:

Base Vol: 37 22 13 36 23 296 338 945 40 20 545 28

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 37 22 13 36 23 296 338 945 40 20 545 28

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95

PHF Volume: 39 23 14 38 24 312 356 995 42 21 574 29

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 39 23 14 38 24 312 356 995 42 21 574 29

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Volume: 39 23 14 38 24 312 356 995 42 21 574 29

-----|-----|-----|-----|

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00

Lanes: 0.64 0.36 1.00 0.62 0.38 1.00 1.00 0.96 0.04 1.00 0.95 0.05

Final Sat.: 1151 685 1900 1121 716 1900 1800 1823 77 1800 1807 93

-----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat: 0.03 0.03 0.01 0.03 0.03 0.16 0.20 0.55 0.55 0.01 0.32 0.32

Crit Moves: **** *

Green/Cycle: 0.20 0.20 0.20 0.20 0.20 0.20 0.28 0.64 0.64 0.10 0.46 0.46

Volume/Cap: 0.17 0.17 0.04 0.17 0.17 0.83 0.69 0.85 0.85 0.12 0.69 0.69

Delay/Veh: 34.6 34.6 32.9 34.6 34.6 57.4 39.6 13.9 13.9 42.8 22.5 22.5

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 34.6 34.6 32.9 34.6 34.6 57.4 39.6 13.9 13.9 42.8 22.5 22.5

LOS by Move: C C C C C E D B B D C C

HCM2kAvgQ: 2 2 0 2 2 12 11 20 20 1 14 14

Note: Queue reported is the number of cars per lane.

APPENDIX K

2030 WITH PROJECT CONDITIONS
INTERSECTION ANALYSIS
(WITHOUT AND WITH IMPROVEMENTS)

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
2030 With Project Weekend Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #101 Deep Creek Rd. (NS) / Bear Valley Rd. (EW)

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxxx]

Street Name: Deep Creek Rd. (NS) Bear Valley Rd. (EW)

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled

Rights: Include Include Include Include

Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 2 0 1 1 0 1 1 0

-----|-----|-----|-----|

Volume Module:

Base Vol: 94 35 88 24 14 26 57 1282 80 63 1088 45

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 94 35 88 24 14 26 57 1282 80 63 1088 45

Added Vol: 0 0 0 0 0 0 0 0 0 45 45 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 94 35 88 24 14 26 57 1282 125 108 1088 45

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95

PHF Volume: 99 37 93 25 15 27 60 1349 132 114 1145 47

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

FinalVolume: 99 37 93 25 15 27 60 1349 132 114 1145 47

Critical Gap Module:

Critical Gp: 7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxx 4.1 xxxx xxxxx

FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx

-----|-----|-----|-----|

Capacity Module:

Cnflct Vol: 2277 2889 675 2209 2997 596 1193 xxxx xxxxx 1481 xxxx xxxxx

Potent Cap.: 22 16 401 25 14 452 592 xxxx xxxxx 460 xxxx xxxxx

Move Cap.: 0 11 401 0 9 452 592 xxxx xxxxx 460 xxxx xxxxx

Volume/Cap: xxxx 3.33 0.23 xxxx 1.57 0.06 0.10 xxxx xxxx 0.25 xxxx xxxx

-----|-----|-----|-----|

Level Of Service Module:

2Way95thQ: xxxx xxxx xxxxx xxxx xxxx xxxxx 0.3 xxxx xxxxx 1.0 xxxx xxxxx

Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx 11.8 xxxx xxxxx 15.4 xxxx xxxxx

LOS by Move: * * * * * B * * C * *

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxx 0 xxxxx xxxx 0 xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx

SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx

Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx

Shared LOS: * * * * * * * * * *

ApproachDel: xxxxxx xxxxxx xxxxxx xxxxxx

ApproachLOS: F F * *

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
2030 With Project Weekend Conditions WIMP
AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #101 Deep Creek Rd. (NS) / Bear Valley Rd. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.550

Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 20.8

Optimal Cycle: OPTIMIZED Level Of Service: C

Street Name: Deep Creek Rd. (NS) Bear Valley Rd. (EW)

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Protected Protected Protected Protected

Rights: Include Include Include Include

Min. Green: 10 20 23 14 10 14 14

Lanes: 1 0 0 1 0 1 0 2 0 1 1 0 1 0

-----|-----|-----|-----|

Volume Module:

Base Vol: 94 35 88 24 14 26 57 1282 80 63 1088 45

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 94 35 88 24 14 26 57 1282 80 63 1088 45

Added Vol: 0 0 0 0 0 0 0 0 0 45 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 94 35 88 24 14 26 57 1282 125 108 1088 45

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95

PHF Volume: 99 37 93 25 15 27 60 1349 132 114 1145 47

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 99 37 93 25 15 27 60 1349 132 114 1145 47

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.05 1.00 1.00 1.05 1.05

FinalVolume: 99 37 93 25 15 27 60 1417 132 114 1203 50

-----|-----|-----|-----|

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00

Lanes: 1.00 0.28 0.72 1.00 0.35 0.65 1.00 2.00 1.00 1.00 1.92 0.08

Final Sat.: 1800 541 1359 1800 665 1235 1800 3800 1900 1800 3649 151

-----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat: 0.05 0.07 0.07 0.01 0.02 0.02 0.03 0.37 0.07 0.06 0.33 0.33

Crit Moves: **** **** ****

Green/Cycle: 0.08 0.18 0.18 0.09 0.19 0.19 0.13 0.56 0.56 0.10 0.53 0.53

Volume/Cap: 0.66 0.37 0.37 0.15 0.12 0.12 0.25 0.66 0.12 0.66 0.63 0.63

Delay/Veh: 73.9 46.0 46.0 52.2 40.7 40.7 49.2 13.6 8.3 70.8 16.1 16.1

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 73.9 46.0 46.0 52.2 40.7 40.7 49.2 13.6 8.3 70.8 16.1 16.1

LOS by Move: E D D D D D D B A E B B

HCM2kAvgQ: 5 4 4 1 1 1 2 14 1 5 13 13

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
2030 With Project Weekend Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #102 Deep Creek Road (NS) / Project Access [Outpost Rd.] (EW)

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: C[15.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1	0	0	1	0	0	0	0	1	0

Volume Module:

Base Vol:	0	179	6	11	201	1	6	2	0	1	8	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	179	6	11	201	1	6	2	0	1	8	0
Added Vol:	0	0	60	90	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	179	66	101	201	1	6	2	0	1	8	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	188	69	106	212	1	6	2	0	1	8	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	188	69	106	212	1	6	2	0	1	8	0

Critical Gap Module:

Critical Gp:	xxxxx	xxxxx	xxxxx	4.1	xxxxx	xxxxx	7.1	6.5	xxxxx	7.1	6.5	xxxxx
FollowUpTim:	xxxxx	xxxxx	xxxxx	2.2	xxxxx	xxxxx	3.5	4.0	xxxxx	3.5	4.0	xxxxx

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	258	xxxx	xxxxx	652	683	xxxxx	649	648	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	1319	xxxx	xxxxx	384	374	xxxxx	386	392	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	1319	xxxx	xxxxx	352	342	xxxxx	359	358	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.08	xxxx	xxxx	0.02	0.01	xxxx	0.00	0.02	xxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	350	xxxx	xxxxx	358	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	15.5	xxxx	xxxxx	15.3	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	C	*	*	C	*	*
ApproachDel:	xxxxxx			xxxxxx			15.5			15.3		
ApproachLOS:	*			*			C			C		

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
2030 With Project Weekend Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #103 Deep Creek Rd. (NS) / Rock Springs Rd. (EW)

Cycle (sec): 71 Critical Vol./Cap.(X): 0.571

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 19.8

Optimal Cycle: OPTIMIZED Level Of Service: B

Street Name: Deep Creek Rd. (NS) Rock Springs Rd. (EW)

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Permitted Permitted Protected Protected

Rights: Include Include Include Include

Min. Green: 17 17 20 20 10 20 10 17 17

Lanes: 0 1 0 0 1 0 1 0 0 1 0 0

-----|-----|-----|-----|

Volume Module:

Base Vol: 25 25 8 17 15 166 140 348 18 6 540 28

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 25 25 8 17 15 166 140 348 18 6 540 28

Added Vol: 0 0 0 0 0 0 45 0 0 0 0 15

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 25 25 8 17 15 166 185 348 18 6 540 43

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95

PHF Volume: 26 26 8 18 16 175 195 366 19 6 568 45

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 26 26 8 18 16 175 195 366 19 6 568 45

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 26 26 8 18 16 175 195 366 19 6 568 45

-----|-----|-----|-----|

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00

Lanes: 0.51 0.49 1.00 0.54 0.46 1.00 1.00 0.95 0.05 1.00 0.93 0.07

Final Sat.: 924 924 1900 980 865 1900 1800 1807 93 1800 1760 140

-----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat: 0.03 0.03 0.00 0.02 0.02 0.09 0.11 0.20 0.20 0.00 0.32 0.32

Crit Moves: **** *

Green/Cycle: 0.28 0.28 0.28 0.28 0.28 0.28 0.16 0.42 0.42 0.21 0.47 0.47

Volume/Cap: 0.10 0.10 0.02 0.06 0.06 0.33 0.68 0.48 0.48 0.02 0.68 0.68

Delay/Veh: 19.2 19.2 18.4 18.9 18.9 21.8 40.5 15.0 15.0 22.2 15.7 15.7

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 19.2 19.2 18.4 18.9 18.9 21.8 40.5 15.0 15.0 22.2 15.7 15.7

LOS by Move: B B B B B C D B B C B B

HCM2kAvgQ: 1 1 0 1 1 3 6 5 5 0 10 10

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
2030 With Project Weekend Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

```

*****
Intersection #101 Deep Creek Rd. (NS) / Bear Valley Rd. (EW)
*****
Average Delay (sec/veh): OVERFLOW      Worst Case Level Of Service: F[xxxxxx]
*****
Street Name:      Deep Creek Rd. (NS)      Bear Valley Rd. (EW)
Approach:         North Bound      South Bound      East Bound      West Bound
Movement:         L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:          Stop Sign      Stop Sign      Uncontrolled      Uncontrolled
Rights:           Include      Include      Include      Include
Lanes:            0 0 1! 0 0      0 0 1! 0 0      1 0 2 0 1      1 0 1 1 0
-----|-----|-----|-----|
Volume Module:
Base Vol:         146 104 162 107 111 96 92 1302 150 139 1076 85
Growth Adj:       1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:      146 104 162 107 111 96 92 1302 150 139 1076 85
Added Vol:        27 0 27 0 0 0 0 0 0 0 0 0
PasserByVol:      0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut:      173 104 189 107 111 96 92 1302 150 139 1076 85
User Adj:         1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:          0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
PHF Volume:       182 109 199 113 117 101 97 1371 158 146 1133 89
Reduct Vol:       0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume:      182 109 199 113 117 101 97 1371 158 146 1133 89
Critical Gap Module:
Critical Gp:      7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxx 4.1 xxxx xxxxx
FollowUpTim:      3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx
-----|-----|-----|-----|
Capacity Module:
Cnflct Vol:       2482 3079 685 2404 3192 611 1222 xxxx xxxxx 1528 xxxx xxxxx
Potent Cap.:      15 12 395 18 10 442 577 xxxx xxxxx 442 xxxx xxxxx
Move Cap.:        0 7 395 0 6 442 577 xxxx xxxxx 442 xxxx xxxxx
Volume/Cap:       xxxx16.04 0.50 xxxx20.34 0.23 0.17 xxxx xxxx 0.33 xxxx xxxx
-----|-----|-----|-----|
Level Of Service Module:
2Way95thQ:        xxxx xxxx xxxxx xxxx xxxx xxxxx 0.6 xxxx xxxxx 1.4 xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx 12.5 xxxx xxxxx 17.1 xxxx xxxxx
LOS by Move:      * * * * * B * * C * *
Movement:         LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.:      xxxx 0 xxxxx xxxx 0 xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:       * * * * * * * * * *
ApproachDel:      xxxxxx xxxxxx xxxxxx xxxxxx
ApproachLOS:       F F * *
*****
Note: Queue reported is the number of cars per lane.
*****

```

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
2030 With Project Weekend Conditions WIMP
PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

```

*****
Intersection #101 Deep Creek Rd. (NS) / Bear Valley Rd. (EW)
*****
Cycle (sec):          105          Critical Vol./Cap.(X):          0.732
Loss Time (sec):      8 (Y+R=4.0 sec)  Average Delay (sec/veh):          30.7
Optimal Cycle: OPTIMIZED          Level Of Service:          C
*****
Street Name:          Deep Creek Rd. (NS)          Bear Valley Rd. (EW)
Approach:             North Bound          South Bound          East Bound          West Bound
Movement:             L - T - R          L - T - R          L - T - R          L - T - R
-----|-----|-----|-----|
Control:              Protected          Protected          Protected          Protected
Rights:               Include          Include          Include          Include
Min. Green:           10    20    20          10    23    23          10    14    14          10    14    14
Lanes:                1    0    0    1    0          1    0    0    1    0          1    0    2    0    1          1    0    1    1    0
-----|-----|-----|-----|
Volume Module:
Base Vol:             146    104    162          107    111    96          92 1302    150          139 1076    85
Growth Adj:           1.00 1.00 1.00          1.00 1.00 1.00          1.00 1.00 1.00          1.00 1.00 1.00
Initial Bse:           146    104    162          107    111    96          92 1302    150          139 1076    85
Added Vol:             27     0    27           0     0     0           0     0     0           0     0     0
PasserByVol:           0     0     0           0     0     0           0     0     0           0     0     0
Initial Fut:           173    104    189          107    111    96          92 1302    150          139 1076    85
User Adj:              1.00 1.00 1.00          1.00 1.00 1.00          1.00 1.00 1.00          1.00 1.00 1.00
PHF Adj:              0.95 0.95 0.95          0.95 0.95 0.95          0.95 0.95 0.95          0.95 0.95 0.95
PHF Volume:           182    109    199          113    117    101          97 1371    158          146 1133    89
Reduct Vol:            0     0     0           0     0     0           0     0     0           0     0     0
Reduced Vol:           182    109    199          113    117    101          97 1371    158          146 1133    89
PCE Adj:              1.00 1.00 1.00          1.00 1.00 1.00          1.00 1.00 1.00          1.00 1.00 1.00
MLF Adj:              1.00 1.00 1.00          1.00 1.00 1.00          1.00 1.05 1.00          1.00 1.05 1.05
FinalVolume:           182    109    199          113    117    101          97 1439    158          146 1189    94
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:             1900 1900 1900          1900 1900 1900          1900 1900 1900          1900 1900 1900
Adjustment:           0.95 1.00 1.00          0.95 1.00 1.00          0.95 1.00 1.00          0.95 1.00 1.00
Lanes:                1.00 0.35 0.65          1.00 0.54 0.46          1.00 2.00 1.00          1.00 1.85 0.15
Final Sat.:           1800 674 1226          1800 1019 881          1800 3800 1900          1800 3522 278
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.10 0.16 0.16          0.06 0.11 0.11          0.05 0.38 0.08          0.08 0.34 0.34
Crit Moves:          ****              ****              ****
Green/Cycle:          0.13 0.23 0.23          0.12 0.22 0.22          0.13 0.48 0.48          0.10 0.45 0.45
Volume/Cap:           0.80 0.70 0.70          0.54 0.52 0.52          0.42 0.80 0.17          0.80 0.75 0.75
Delay/Veh:            68.8 46.2 46.2          53.6 40.8 40.8          47.9 22.4 13.1          75.1 23.1 23.1
User DelAdj:          1.00 1.00 1.00          1.00 1.00 1.00          1.00 1.00 1.00          1.00 1.00 1.00
AdjDel/Veh:           68.8 46.2 46.2          53.6 40.8 40.8          47.9 22.4 13.1          75.1 23.1 23.1
LOS by Move:          E    D    D          D    D    D          D    C    B          E    C    C
HCM2kAvgQ:            8    10    10           4     6     6           3    19    2           7    16    16
*****

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Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
2030 With Project Weekend Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #102 Deep Creek Road (NS) / Project Access [Outpost Rd.] (EW)

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: C [17.7]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0

Volume Module:

Base Vol:	0	375	6	0	333	1	2	0	0	2	0	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	375	6	0	333	1	2	0	0	2	0	4
Added Vol:	0	0	0	0	0	0	0	0	0	36	0	54
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	375	6	0	333	1	2	0	0	38	0	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	395	6	0	351	1	2	0	0	40	0	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	395	6	0	351	1	2	0	0	40	0	61

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.1	xxxx	xxxxx	7.1	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	3.5	4.0	3.3

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	779	xxxx	xxxxx	749	749	398
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	315	xxxx	xxxxx	331	343	656
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	286	xxxx	xxxxx	331	343	656
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	0.12	0.00	0.09

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	17.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*	*	*	*	C	*	*	*	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	472	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.7	xxxxx			
Shared LOS:	*	*	*	*	*	*	*	*	*	*	B	*			
ApproachDel:	xxxxxxx			xxxxxxx			17.7			14.7					
ApproachLOS:	*			*			C			B					

Note: Queue reported is the number of cars per lane.

Deep Creek Rodeo, Livestock Arena, Equestrian Arena (JN 4786)
2030 With Project Weekend Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #103 Deep Creek Rd. (NS) / Rock Springs Rd. (EW)

Cycle (sec): 96 Critical Vol./Cap.(X): 0.785

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 27.9

Optimal Cycle: OPTIMIZED Level Of Service: C

Street Name: Deep Creek Rd. (NS) Rock Springs Rd. (EW)

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

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Control: Permitted Permitted Protected Protected

Rights: Include Include Include Include

Min. Green: 17 17 17 20 20 20 10 20 20 10 17 17

Lanes: 0 1 0 0 1 0 1 0 0 1 0 1 0 0

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Volume Module:

Base Vol: 37 22 13 36 23 296 338 945 40 20 545 28

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 37 22 13 36 23 296 338 945 40 20 545 28

Added Vol: 0 0 0 9 0 27 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 37 22 13 45 23 323 338 945 40 20 545 28

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95

PHF Volume: 39 23 14 47 24 340 356 995 42 21 574 29

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 39 23 14 47 24 340 356 995 42 21 574 29

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 39 23 14 47 24 340 356 995 42 21 574 29

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Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00

Lanes: 0.64 0.36 1.00 0.67 0.33 1.00 1.00 0.96 0.04 1.00 0.95 0.05

Final Sat.: 1151 685 1900 1213 620 1900 1800 1823 77 1800 1807 93

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Capacity Analysis Module:

Vol/Sat: 0.03 0.03 0.01 0.04 0.04 0.18 0.20 0.55 0.55 0.01 0.32 0.32

Crit Moves: ****

Green/Cycle: 0.21 0.21 0.21 0.21 0.21 0.21 0.28 0.63 0.63 0.10 0.45 0.45

Volume/Cap: 0.16 0.16 0.03 0.19 0.19 0.86 0.71 0.87 0.87 0.11 0.71 0.71

Delay/Veh: 32.0 32.0 30.5 32.4 32.4 57.5 39.1 16.6 16.6 40.2 22.7 22.7

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 32.0 32.0 30.5 32.4 32.4 57.5 39.1 16.6 16.6 40.2 22.7 22.7

LOS by Move: C C C C C E D B B D C C

HCM2kAvgQ: 1 1 0 2 2 13 11 22 22 1 13 13

Note: Queue reported is the number of cars per lane.

APPENDIX L

PRELIMINARY CONSTRUCTION COST ESTIMATES
FOR CONGESTION MANAGEMENT PLAN

APPENDIX G

PRELIMINARY CONSTRUCTION COST ESTIMATES FOR CONGESTION MANAGEMENT PLAN

**PRELIMINARY CONSTRUCTION COST ESTIMATES
FOR
CONGESTION MANAGEMENT PLAN**

Add One Lane Each Direction on Freeway			
Asphalt Concrete Pavement		\$2,300,000 Per Mile	
Portland Cement Concrete Pavement		\$2,800,000 Per Mile	
Includes: Excavation Paving Section Barrier Shoulder Upgrade Drainage System Traffic Control Mobilization @10% Design @11% Construction Mgt. @12.5%		Excludes: Environmental Costs Right of Way Widening of Bridge Structures Added Retaining Walls Added Sound Walls	
Widen Existing UC Structures			
Total Cost =		\$160 Per Square Foot	
Includes: Structure Mobilization @10% Design @11% Construction Mgt. @12.5%		Excludes: Environmental Costs Right of Way Traffic Control Ramp Modifications Signal/Lighting Up Grades Drainage Upgrades Added Retaining Walls Added Sound Walls	
Diamond Interchanges			
\$10,000,000	EACH	NEW IC	Minimal Row/Environmental
\$15,000,000	EACH	NEW IC	Includes Row/Environmental
\$20,000,000	EACH	EXISTING	Minimal Row/Environmental
\$25,000,000	EACH	EXISTING	Includes Row/ Environmental
Includes: Structure Retaining Walls Soil Nail Walls Drainage System Ramps Mobilization @ 10% Design @ 11% Construction Mgt. @ 12.5%		Excludes: As listed	

Retaining Walls			
Height Feet	Structure Cost \$/LF	Mobilization Design Constr. Mgt. \$/LF	Total \$/LF
4	\$190	\$70	\$260
6	\$260	\$90	\$350
8	\$380	\$140	\$520
10	\$430	\$150	\$580
12	\$480	\$170	\$650
14	\$590	\$210	\$800
16	\$660	\$240	\$900
Excludes: Environmental Costs Right of Way			
12' High Sound Walls (Masonry Block on Footing)			
Structure Cost \$/Mile		Mobilization Design Constr. Mgt. \$/Mile	Total \$/Mile
\$800,000		\$300,000	\$1,100,000
Widen Conventional Highway			
1. Add one outside lane (Work includes earthwork, modify existing drainage system and construct AC shoulder section. Asphalt Concrete Pavement		\$1,000,000/Mile	
2. Add one outside lane each direction (Work includes earthwork, modify existing drainage system and construct AC shoulder section) Asphalt Concrete Pavement		\$2,000,000/Mile	
With Median Concrete Barrier		\$2,200,000/Mile	
With Median Double Thrie Beam Barrier		\$2,300,000/Mile	
Local Interchange Improvements			
1. New Interchange			
Urban Interchange		\$10,000,000 to \$17,000,000	
Partial – Cloverleaf Interchange (Work includes new OC structure, earthwork, signal)		\$6,000,000	
Diamond Interchange (Work includes new OC structure, earthwork, signal)		\$5,000,000	

Used for Schlemmer
Interchange

Local Interchange Improvements CONT...		
2.	Reconstruct Existing Interchange	
	Realign and widen existing ramps (to 2 lanes)	\$750,000/Each Ramp
	Construct Loop on – ramps (Does not include realigning existing ramp)	\$700,000/Each Ramp
	Upgrade existing Diamond IC to Partial – Cloverleaf	\$6,000,000
3.	Improve Existing Interchange	
	Widen ramps (From one to two lanes)	\$350,000/Each Ramp
	Widen existing OC structure	\$110/Sq. Ft.
	Signalize ramp intersection	\$90,000/Location
	Upgrade existing signal at ramp terminal	\$75,000/Intersection
	Upgrade existing signal at ramp terminal (Add lights only)	\$25,000/Each
4.	Ramp Metering System	\$60,000/Each location
Intersection Improvements		
1.	Signalization of local intersection (with some roadwork)	~~\$250,000~~ → \$400,000 per County staff direction.
2.	Upgrade existing intersection signalization	\$75,000
3.	Upgrade existing Traffic Controller/Assembles	\$40,000/Each
4.	Install new signal	\$90,000/location
5.	Add signal heads	\$25,000/Intersection
6.	Construct left – turn lane (240' long)	\$50,000/Each Location
7.	Street widening (12' wide) (Pavement only)	\$180,000/Mile
8.	Curb and gutter (Type A2-8)	\$15/LF

Construct through lane at intersection \$289,720 per County
staff direction

Other Improvements	
1. Construct new OC structure (Does not include roadway work)	\$100/Sq. Ft.
2. Construct Retaining Walls (Type 1)	\$285/LF (H=8') \$360/LF (H=10') \$460/LF (H=12') \$560/LF (H=14')
3. Construct Soundwall	\$1,000,000/Mile (H=12')
4. Traffic Management Plan	10% of total construction costs
NOTE: This cost estimate does not include the following items: 1. R/W engineering, appraisal, acquisition and utilities relocation costs. 2. Minor items and supplemental work (10%). 3. Mobilization (10%). 4. Contingencies (25%). 5. Landscaping costs.	
General Note: When adding a through lane, the minimum distance is 600' approach and 600' departure to the next intersection.	